# User Guide

INSIGNIA™

47" LCD TV

**NS-L47Q09-10A**

INSIGNIA™

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# CHILD SAFETY

## It makes a difference how and where you use your flat panel display

### As you enjoy your new product, keep these safety tips in mind

## *The issue*

The home theater entertainment experience is a growing trend, and larger TVs are popular purchases. However, TVs are not always supported on the proper stands or installed according to the manufacturer's recommendations. We and the consumer electronics industry are committed to making home entertainment enjoyable and safe.

*TVs that are inappropriately placed on dressers, bookcases, shelves, desks, speakers, chests, or carts may fall over and cause injury.*

## *Tune into safety*

- One size of TV stand does **not** fit all. Use only a TV stand rated for the weight of your TV.
- Carefully read and understand all enclosed instructions for proper use of this product.
- Don't let children climb on or play with entertainment system furniture and TVs.
- Don't place TVs on furniture that can easily be used as steps, such as a chest of drawers.
- Remember that children can become excited while watching a program, especially on a "larger-than-life" TV. Make sure that you place or install the TV where it cannot be pushed, pulled over, or knocked down.
- Make sure that you route all cords and cables so that they cannot be pulled or grabbed by curious children.

## *Wall mounting*

If you decide to wall mount your TV, always remember:

- One size of wall mount does **not** fit all. Use only a wall mount rated for the weight of your TV and that has been recommended by this TV manufacturer, listed in this manual, or otherwise listed by an independent laboratory as suitable for your TV.
- Follow all instructions supplied by the TV and wall mount manufacturers.
- If you have any doubts about your ability to safely wall mount your TV, get help from a professional installer.
- Make sure that the wall where you are mounting the TV is appropriate. Some wall mounts are not designed to be mounted to walls backed with steel studs or cinder blocks. If you are unsure, ask a professional installer.

CEA® Consumer Electronics Association

- TVs can be heavy. At least two people are required for safe wall mount installation.

# Important safety instructions

**CAUTION**
**RISK OF ELECTRIC SHOCK**
**DO NOT OPEN**

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within your TV. This label is located on the back of your TV.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying your TV.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. The *mains plug* is the disconnecting device. The plug must remain readily operable.
16. The apparatus with grounding-type plug is a class I apparatus. Class I apparatus need to be connected to earth ground wire to prevent possible electric shock. Make sure that you connect the class I apparatus to a mains socket outlet with a protective earthing connection.
17. Remote control batteries should not be exposed to excessive heat such as sunshine, fire, or the like.
18. The apparatus shall not be exposed to dripping or splashing, and no objects filled with liquids, such as vases, shall be placed on the apparatus.

## Warnings

***Electric shock hazard***

To reduce the risk of fire or electric shock, do not remove any cover or expose the device to rain or moisture. No user-serviceable parts are inside. Refer servicing to qualified service technicians.

***Lightning***

For added protection for your device receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the power outlet and disconnect any antenna or cable system. This helps prevent property damage and personal injury from lightning and power line surges.

***Power lines***

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

***Handling the LCD panel***

- Your TV's screen is made of glass. Do not drop your TV or hit, jolt, or press hard against the LCD panel. If the screen breaks, be careful of broken glass.
- If the LCD panel is broken, make absolutely sure that you do not touch the liquid in the panel. This may cause skin inflammation.
- If the liquid gets in your mouth, immediately gargle, rinse, and consult with your doctor. Also, if the liquid gets in your eyes or touches your skin, consult with your doctor after rinsing for at least 15 minutes or longer in clean water.

***Replacement parts***

When replacement parts are required, make sure that the service technician uses replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, personal injury, or other hazards.

***Safety check***

After completing any service or repair to this device, ask the service technician to perform routine safety checks to determine that your TV is in correct operating condition.

***Power source***

Operate your TV only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult an electrician or your local power company.

## Cautions

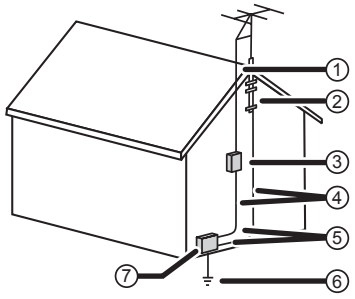
***Damage requiring service***

Unplug this TV from the power outlet and refer servicing to qualified service personnel under the following conditions:

- When the power supply cord or plug is damaged or frayed.
- If liquid has been spilled or objects have fallen into your TV.
- If your TV has been exposed to rain or water.
- If your TV does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions because incorrect adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore your TV to its normal operation.
- If your TV has been dropped or damaged in any way.
- When your TV exhibits a distinct change in performance.

***Outdoor antenna grounding***

If an outside antenna or cable system is connected to your TV, make sure that the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA No. 70, provides information with respect to correct grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of the antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.




| | |
|---|---|
| 1 | Antenna lead-in wire |
| 2 | Grounding clamp |
| 3 | Antenna discharge unit |
| 4 | Grounding conductors |
| 5 | Ground clamps |
| 6 | Power service grounding electrode system |
| 7 | Electric service equipment |

***Note to CATV system installer***

Article 820 of the National Electrical Code, ANSI/NFPA No. 40 provides guidance for correct grounding. Specifically, it states that the cable ground must be connected to the grounding system of the building as close to the point of cable entry as practical.

***Condensation***

Moisture will form on the TV if the TV is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly. When this happens, the TV's performance may be impaired. To prevent this, let the TV stand in its new surroundings for about an hour before switching it on, or make sure that the room temperature rises gradually.

Condensation may also form during the summer if the TV is exposed to the breeze from an air conditioner. In such cases, change the location of the TV.

***Mobile telephone warning***

To avoid interference with your TV picture and sound, operating problems, or even damage, keep your cordless and cellular telephones away from the TV.

## End of life directives

Your TV contains tin-lead solder and a fluorescent lamp containing a small amount of mercury. Disposal of these materials may be regulated for environmental reasons. Your TV also contains material that can be recycled and reused. For disposal or recycling information, contact your local authorities or the Electronic Industries Alliance at www.eia.org to find a recycler in your area.

## Non-active pixels

The LCD panel contains almost 3 million thin film transistors, which provide exceptionally sharp video quality. Occasionally, a few non-active pixels may appear on the screen as a fixed blue, green, or red point. These non-active pixels do not adversely affect the performance of your TV, and are not considered defects.

# Insignia 47" LCD TV

## Introduction

Congratulations on your purchase of a high-quality Insignia product. Your NS-L47Q09-10A represents the state of the art in LCD TV design and is designed for reliable and trouble-free performance.

## Installing a wall-mount bracket

**Warning**

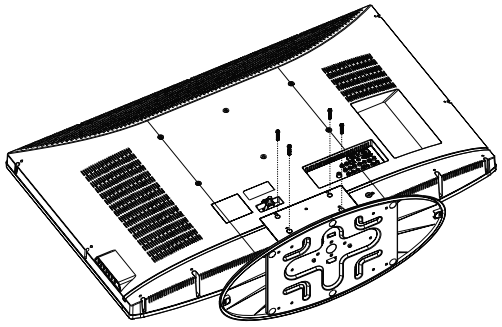
This apparatus is intended to be supported by UL Listed wall mount bracket.

**To install a wall-mount bracket:**

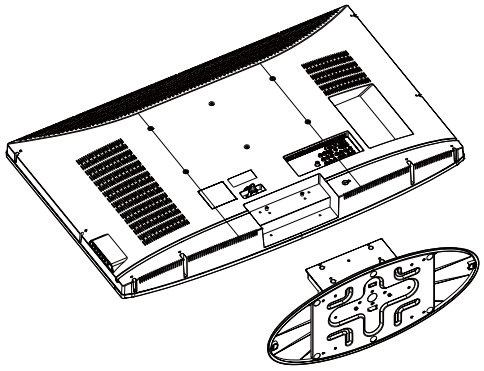
**Warning**

These servicing instructions are for use by qualified service personnel only. To reduce the risk of hazards, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

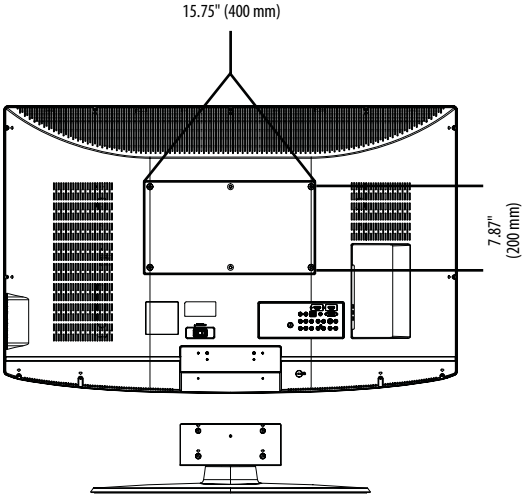
**1** Remove the four screws that secure the stand to your TV.



**2** Remove the stand.



**3** Attach the wall-mount bracket with M6 screws (not included).



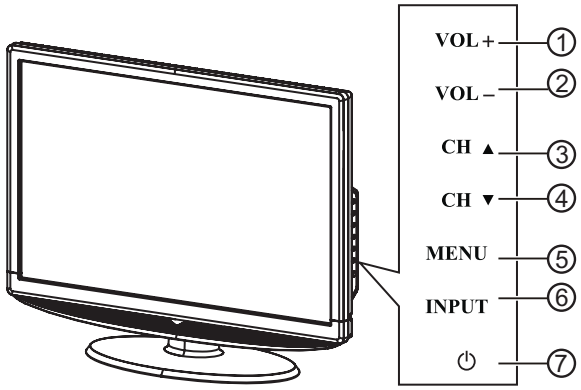

## TV components

### Accessories

Make sure that the following accessories are provided in the packaging:

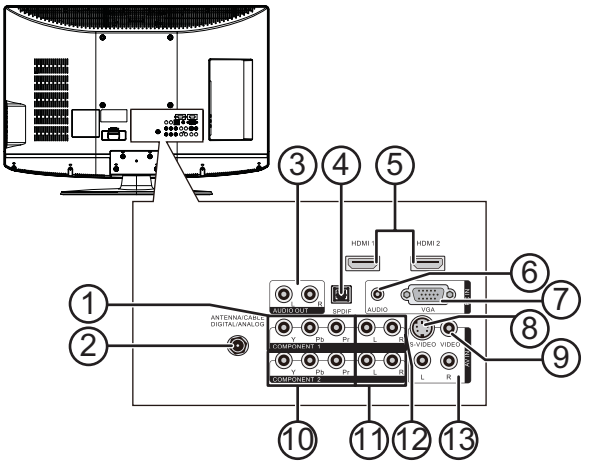
- Remote control
- AAA batteries (2)
- AC power cord
- Component cable
- *User Guide*
- *Quick Setup Guide*

## Front



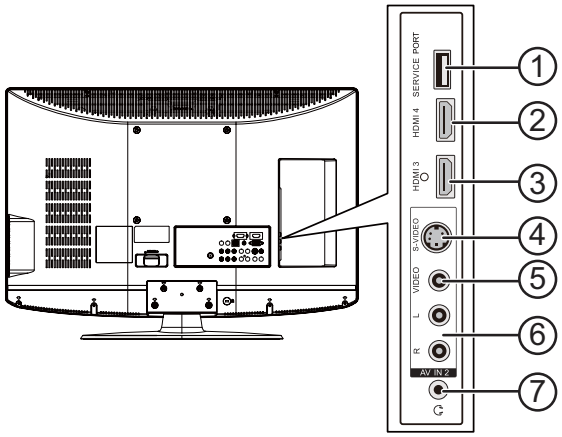

| # | Button | Description |
|---|---|---|
| 1 | VOL+ | Press to increase the volume. In Menu mode, functions as the right arrow to go to the next menu or increase a setting. |
| 2 | VOL– | Press to decrease the volume. In Menu mode, press to decrease a setting. |
| 3 | CH ▲ | Press to go to the next higher channel. In Menu mode, functions as the up arrow. |
| 4 | CH ▼ | Press to go to the next lower channel. In Menu mode, functions as the down arrow. |
| 5 | MENU | Press to open the on-screen menu. |
| 6 | INPUT | Press to open the *Source List* menu, then press the arrow keys to cycle through the available input sources. In Menu mode, functions as the **OK/ENTER** button. |
| 7 | ⏻ (power) | Press to turn your TV on or off (standby mode). When your TV is off, power still flows into it. To disconnect power, unplug the power cord. |

## Back



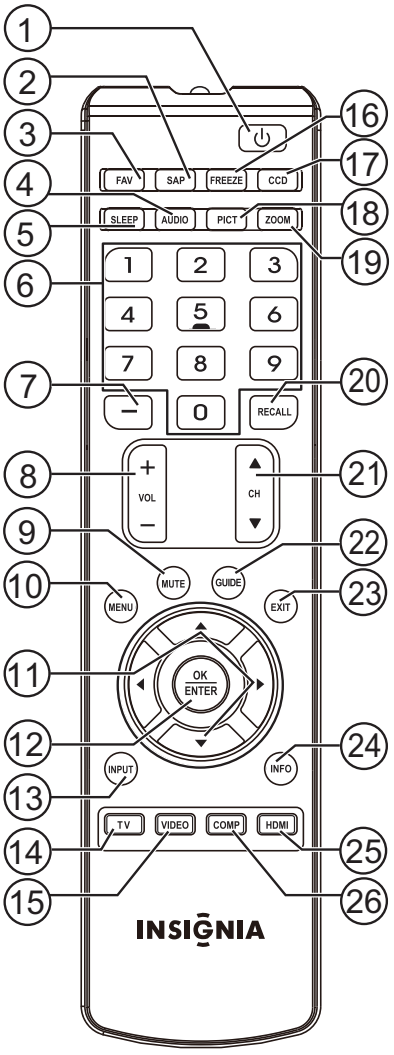

| # | Jack | Description |
|---|---|---|
| 1 | COMPONENT 1 Y/Pb/Pr | Connect the video for a component video device to these jacks. For more information, see “Connecting a component video device” on page 12. |
| 2 | ANTENNA/CABLE DIGITAL/ANALOG | Connect an antenna or cable TV to this jack. For more information, see “Connecting an outdoor antenna” on page 8 or “Connecting cable TV” on page 9. |
| 3 | AUDIO OUT R / L | Connect an external sound system to these jacks. For more information, see “Connecting an analog audio amplifier” on page 14. |
| 4 | SPDIF | Connect an audio amplifier to this jack. For more information, see “Connecting a digital audio amplifier” on page 13. |
| 5 | HDMI 1/HDMI 2 | Connect HDMI devices to these jacks. For more information, see “Connecting an HDMI device” on page 11. |
| 6 | PC IN AUDIO | Connect the audio for a computer to this jack. For more information, see “Connecting a computer” on page 13. |
| 7 | PC IN VGA | Connect the video (VGA) for a computer to this jack. For more information, see “Connecting a computer” on page 13. |
| 8 | AV IN 1 S-VIDEO | Connect the video for an S-Video device to this jack. For more information, see “Connecting an S-Video device” on page 12. |
| 9 | AV IN 1 VIDEO | Connect the video for a standard AV device to this jack. For more information, see “Connecting a VCR” on page 10. |
| 10 | COMPONENT 2 Y/Pb/Pr | Connect the video for a component video device to these jacks. For more information, see “Connecting a component video device” on page 12. |
| 11 | COMPONENT 2 L/R | Connect the audio for a component video device to these jacks. For more information, see “Connecting a component video device” on page 12. |
| 12 | COMPONENT 1 L/R | Connect the audio for a component video device to these jacks. For more information, see “Connecting a component video device” on page 12. |
| 13 | AV IN 1 L/R | Connect the audio for an S-Video or standard AV device to these jacks. For more information, see “Connecting an S-Video device” on page 12 or “Connecting a VCR” on page 10. |

## Side




| # | Jack | Description |
|---|---|---|
| 1 | SERVICE PORT | For service only. |
| 2 | HDMI 4 | Connect an HDMI device to this jack. For more information, see “Connecting an HDMI device” on page 11. |
| 3 | HDMI 3 | Connect an HDMI device to this jack. For more information, see “Connecting an HDMI device” on page 11. |
| 4 | AV IN 2 S-VIDEO | Connect the video for an S-Video device to this jack. For more information, see “Connecting an S-Video device” on page 12. |
| 5 | AV IN 2 VIDEO | Connect the video for a standard AV device to this jack. For more information, see “Connecting a VCR” on page 10. |
| 6 | AV IN 2 L/R | Connect the audio for an S-Video or standard AV device to these jacks. For more information, see “Connecting an S-Video device” on page 12 or “Connecting a VCR” on page 10. |
| 7 | (headphone) | Connect headphones to this jack. For more information, see “Connecting headphones” on page 13. |

## Remote control




| # | Button | Description |
|---|---|---|
| 1 | (power) | Press to turn your TV on or off (standby mode). When your TV is off, power still flows into it. To disconnect power, unplug the power cord. |
| 2 | SAP | In analog TV mode, press to select **Stereo**, **Mono**, or **SAP**. In digital TV mode, press to select the audio track (language). For more information, see “Adjusting the sound” on page 19. |
| 3 | FAV | Press to open the Favorite Channel list. For more information, see “Setting up a favorite channel list” on page 20. |
| 4 | AUDIO | When the **Equalizer** option is turned on, press to toggle among different Equalizer modes. When the **Equalizer** option is turned off, toggle to adjust the treble, bass, or SRS TruSurround HD. For more information, see “Adjusting the sound” on page 17. |
| 5 | SLEEP | Press to set the sleep timer. You can select **Off**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, **180**, or **240** minutes. For more information, see “Setting the sleep timer” on page 28. |
| 6 | Numbers | Press to enter channel numbers or the parental control password. |
| 7 | — | Press to enter a digital sub-channel number. For more information, see “Selecting a channel” on page 16. |
| 8 | VOL+/VOL– | Press to increase or decrease the volume. |

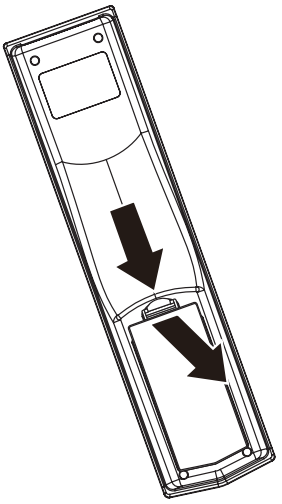
| # | Button | Description |
|---|---|---|
| 9 | MUTE | Press to mute the sound. Press again to restore the sound. |
| 10 | MENU | Press to open the on-screen menu. |
| 11 | ◄►▲▼ | Press to move left, right, up, or down in on-screen menus. |
| 12 | OK/ENTER | Press to confirm selections or changes. |
| 13 | INPUT | Press to open the *Source List*, then press ▲ or ▼ to cycle through the available input sources. For more information, see "Selecting the video input source" on page 15. |
| 14 | TV | Press to select TV as the video source. |
| 15 | Video | Press to select the device connected the **AV 1 VIDEO, AV 2 VIDEO,** or **S-VIDEO** jack. |
| 16 | FREEZE | Press to freeze the video image. Press again to unfreeze the image. For more information, see "Freezing the picture" on page17.<br>**Caution:** Do not freeze the video image for long periods of time. You may damage the TV screen. |
| 17 | CCD | Press to turn closed captioning on or off. You can select **CC Off**, **CC On**, or **CC On when Mute**. For more information, see "Viewing closed captioning" on page 26. |
| 18 | PICT | Press to select the video mode. You can select **Vivid**, **Standard**, **Energy Savings**, **Theater**, **Sports**, or **Custom**. For more information, see "Adjusting the TV picture" on page 16. |
| 19 | ZOOM | Press to select the aspect ratio. For more information, see "Adjusting Advanced Video settings" on page 17. |
| 20 | RECALL | In TV mode, press to return to the previous channel. |
| 21 | CH ▲/CH ▼ | Press to change TV channels. For more information, see "Selecting a channel" on page 16. |
| 22 | GUIDE | Press to display the program guide. For more information, see "Displaying additional information" on page 16. |
| 23 | EXIT | Press to close the on-screen menu. |
| 24 | INFO | Press to display TV status information, such as the channel number, channel name (if available), or signal source. For more information, see "Displaying additional information" on page 16. |
| 25 | HDMI | Press one or more times to select the device connected to the **HDMI 1**, **HDMI 2**, **HDMI 3**, or **HDMI 4** jack. |
| 26 | COMP | Press to select the device connected to the **COMPONENT 1** or **COMPONENT 2** jacks. |

# Using the remote control

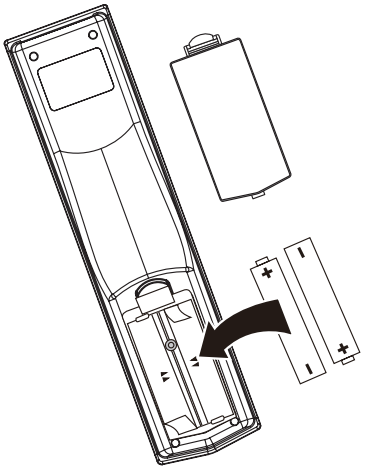
## Installing the remote control batteries

**To install the remote control batteries:**

**1** Remove the battery cover.



**2** Insert two AAA batteries into the battery compartment. Make sure that you match the + and – symbols on the batteries with the + and – symbols in the battery compartment.



**3** Replace the battery cover.

**Cautions**

- Batteries should not be exposed to excessive heat, such as sunshine, heat registers, or fire.
- Battery chemicals can cause a rash. If the batteries leak, clean the battery compartment with a cloth. If chemicals touch your skin, wash immediately.
- Make sure that batteries are disposed of correctly. Do not burn or incinerate.

**Notes**

- Do not mix batteries of different types.
- Do not mix old and new batteries.
- Remove batteries when the charge is depleted.
- If the remote control is not going to be used for an extended period of time, remove the batteries.

## Aiming the remote control

**To aim the remote control:**

- Point the remote control towards the remote sensor on the front of your TV.

**Notes**

- Do not expose the remote control to shock or liquids.
- Do not use the remote control in an area with high humidity.
- Do not place the remote control in direct sunlight.
- Do not place objects, such as furniture, between the remote control and the remote sensor.
- The remote control may not work if direct sunlight or bright light shines on the remote sensor. Either move your TV or change the angle at which you use the remote control.

## Programming a universal remote control to work with your TV

You can operate your Insignia TV with a new or existing universal remote control.

**To program a universal remote control:**

1. Find the code for your universal remote control by identifying its model (or your set-top box's remote control manufacturer and model) on the charts below, then making note of the numbered code below it. You will use the numbered code to program your remote control to work with your Insignia TV.

**Insignia TV codes for universal remote controls (for all Insignia TVs manufactured after Jan. 1, 2007)**

| Universal remote control manufacturers and models | | | | |
|---|---|---|---|---|
| Philips PHDVD5, PH5DSS, PMDVR8, PDVR8 | RCA RCU807 | One for All URC-6690 | Sony RM-VL600 | |
| **115** | **135** | **0464** | **8043** | |

| Set-top box manufacturers and models | | | | |
|---|---|---|---|---|
| Comcast M1057 | Dish Network VIP508, VIP622 | Motorola DRC800 | TIVO Series 3, HD | DirectTV RC23 |
| **0463** | **720** | **0463** | **0091** | **10463** |

Codes for other remote controls are available online at:

www.insigniaproducts.com/universalcontrolcodes.aspx

**Tips**

- The brand name is often visible on the front of the universal remote control, and the model number is often visible on the back.
- If your universal remote control isn't listed on the chart, refer to your universal remote control's instructions and try codes for the brands Orion, Emerson, Memorex, Sansui, Sylvania, or Zenith. You may need to try several codes before finding a match.

2. Follow your universal remote control's instructions to enter the TV code you found in Step 1.

**Tips**

- If your universal remote control has a code search feature, run a code search to identify a code that matches your TV. See your universal remote control's instructions for details.
- If your universal remote control has a "Learn" feature, you can manually program it using the Insignia TV remote to "teach" the commands one at a time. See your universal remote control's instructions for details.

3. If all else fails, you must use a different universal remote control that can operate both your set-top box and your TV. Four such remotes are listed on the chart, but many other compatible models are available in the market.

For more help, call technical support for your universal remote control or set-top box manufacturer, or call the Insignia Customer Care Center at 1-877-467-4289.

# Making connections

## Connecting the power

**To connect the power:**

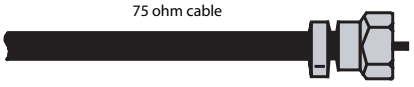
- Plug the power cord into the **AC IN** jack on the back of your TV, then plug the other end of the cord into a power outlet.

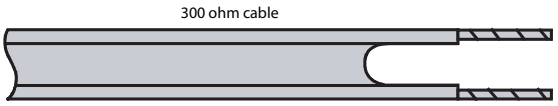
**Cautions**

- Make sure that you use the correct type of power. See the label on your TV.
- If you do not intend to use your TV for an extended period of time, unplug the power cord from the power outlet.

## Connecting an outdoor antenna

Antenna cables come in two types: 75 ohm and 300 ohm.




**To connect an outdoor antenna:**

1. Turn off your TV and all connected equipment.
2. If your antenna cable has a 75 ohm connector, connect the cable to the **ANTENNA/CABLE DIGITAL/ANALOG** jack on the back of your TV.

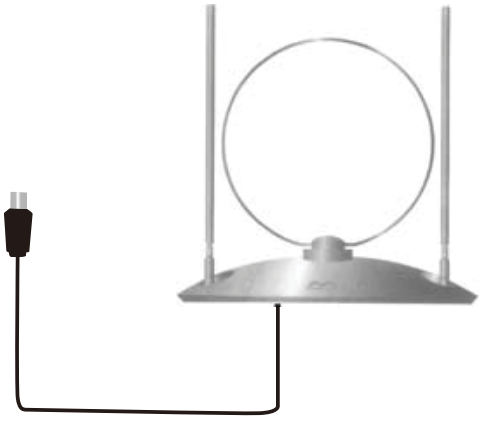
   Or,

   If your antenna cable has a 300 ohm connector, connect the cable to a 300-75 ohm adapter (not included), connect the adapter to a 75 ohm cable, then connect the other end of the 75 ohm connector to the **ANTENNA/CABLE DIGITAL/ANALOG** jack on the back of your TV.
3. Connect the other end of the cable to the antenna jack.

## Connecting an indoor antenna

**To connect an indoor antenna:**

1. Turn off your TV and all connected equipment.
2. Connect the included dual-telescoping dipole antenna to the **ANTENNA/CABLE DIGITAL/ANALOG** jack on the back of your TV.



**Note**

Distance from the transmitting source, a man-made shelter, or natural atmospheric conditions might influence the reception, which is not related to antenna performance.

## Connecting cable TV

Your TV has a 75 ohm jack for connecting cable TV.

Some cable TV providers scramble the signals for "premium" (pay) channels. To view these channels, you need a converter/descrambler box.

If you do not require a converter/descrambler box, you can connect your cable TV directly to your TV. For more information, see "No converter/descrambler box" on page 9.

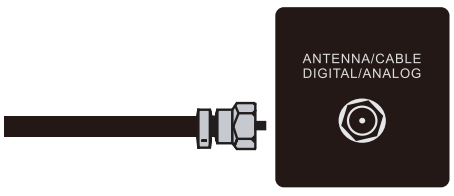
If you require a converter/descrambler box, you can connect your cable TV using an RF switch (not included). For more information about connecting a converter/descrambler box, see "With converter/descrambler box" on page 9 and contact your cable TV provider.

You can also connect cable TV using an HDMI, component video, S-Video, or AV connection, depending on your cable box. For more information, see "Connecting cable TV via a cable TV box" on page 9.

### *No converter/descrambler box*

**To connect cable TV without a converter/descrambler box:**

1. Connect one end of a 75 ohm cable to the coaxial jack on the back of your TV.




2. Connect the other end of the cable to the cable TV wall outlet.

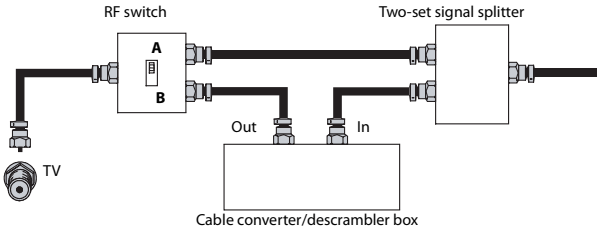
### *With converter/descrambler box*

If your cable box descrambles only some channels (such as premium channels), you need a two-way splitter, an RF (A/B) switch, and four lengths of antenna cable. The two-way splitter and RF switch are not provided.

**To connect cable TV with a converter/descrambler box:**

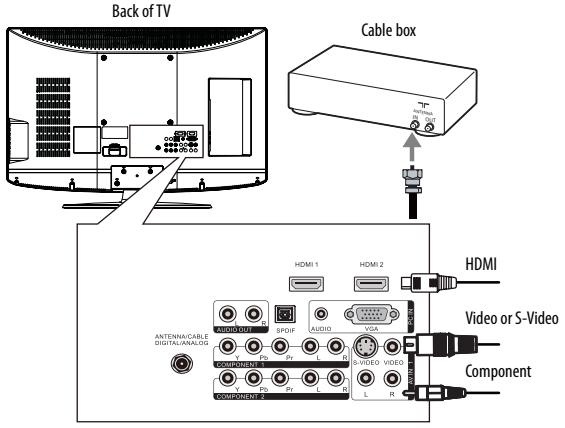
- Use the following illustration as a guide to connect a converter/descrambler box.

  Set the RF switch to the **A** position to tune to unscrambled channels using your TV remote control. Set the RF switch to the **B** position to watch scrambled channels using the converter/descrambler controls.




### *Connecting cable TV via a cable TV box*

1. Connect the incoming cable from the cable wall jack to the cable-in jack on the cable box.
2. Depending on the jacks available on the cable box, connect a cable from the outgoing jacks on the cable box to the corresponding jacks on the back of your TV. The connection can be to the cable-out, HDMI, component video, S-Video, or AV jack.

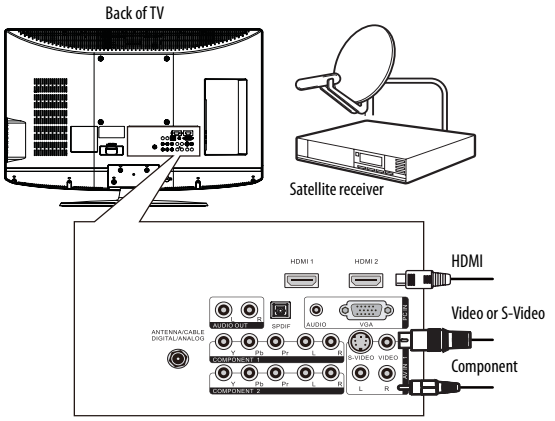



3. If you use a component video, S-Video, or AV cable, connect an audio cable to the corresponding jacks on the back of your TV and on the cable box.

## Connecting satellite TV via a satellite TV box

**To connect satellite TV:**

1. Connect the incoming cable from the satellite wall jack to the satellite-in jack on the satellite box.
2. Depending on the jacks available on the satellite TV receiver (set-top box), connect a cable from the outgoing jacks on the satellite box to the corresponding jacks on the back of your TV. The connection can be to the HDMI, component video, S-Video, or AV jack.

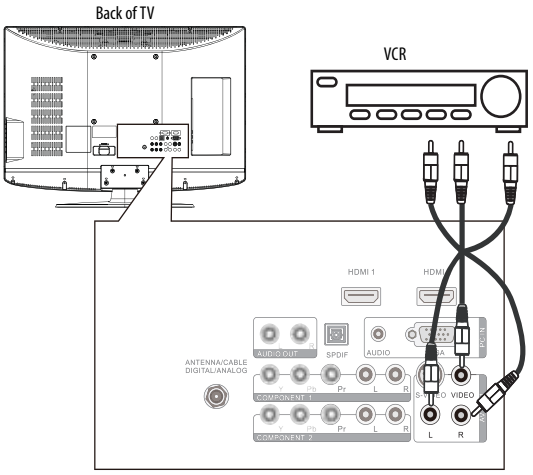



3. If you use a component video, S-Video, or AV cable, connect an audio cable to the corresponding jacks on the back of your TV and on the satellite box.

## Connecting a VCR

**To connect a VCR:**

1. Connect an AV cable to the **AV IN 1 VIDEO** and **AV IN 1 L** and **R** audio jacks on the back of your TV.




2. Connect the other end of the cable to the **VIDEO OUT** and **AUDIO OUT** jacks on the VCR.

**Note**

If a device is connected to the **S-VIDEO** jack, the **S-VIDEO** jack controls the **AV IN 1 L** and **R** jacks.

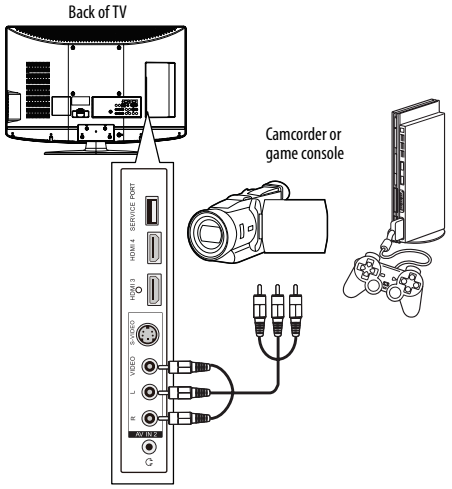
To assign the audio jacks to the **AV IN 1 VIDEO** jack, unplug the S-Video device.

3. Turn on your TV, then turn on the VCR.
4. Press **INPUT** to open the *Source List*, then press ▲ or ▼ to select **AV1**.
5. Insert a videotape into the VCR, then press **PLAY**.

## Connecting a camcorder or game console

**To connect a camcorder or game console:**

1 Connect an AV cable to the **AV IN 2 VIDEO** and **AV IN 2 L** and **R** audio jacks on the side of your TV.




2 Connect the other end of the cable to the **VIDEO OUT** and **AUDIO OUT** jacks on the camcorder or game console.

3 Turn on your TV, then turn on the camcorder or game console.

4 Press **INPUT** to open the *Source List*, then press ▲ or ▼ to select **AV2**.

**Note**

If a device is connected to the **S-VIDEO** jack, the **S-VIDEO** jack controls the **AV IN 2 L** and **R** audio jacks.

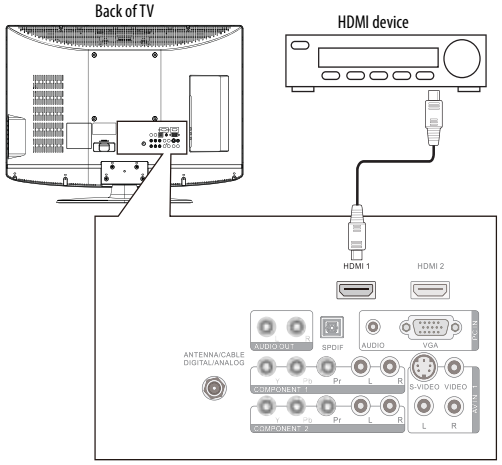
To assign the audio jacks to the **AV IN 2 VIDEO** jack, unplug the S-Video device.

## Connecting an HDMI device

You can connect an HDMI device to the **HDMI 1** or **HDMI 2** jack on the back of your TV or to the **HDMI 3** or **HDMI 4** jack on the side of your TV.

**To connect an HDMI device to the back of your TV:**

1 Connect an HDMI cable to the **HDMI 1** or **HDMI 2** jack on the back of your TV and to the **HDMI OUT** jack on the HDMI device.




2 Turn on your TV, then turn on the HDMI device.

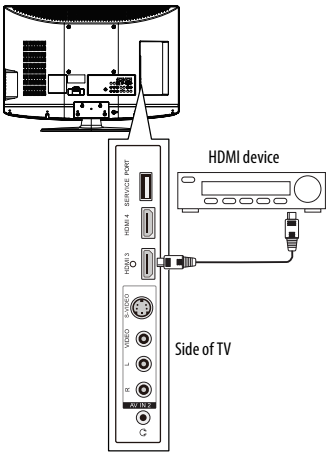
3 Press **INPUT** to open the *Source List*, then press ▲ or ▼ to select **HDMI 1** or **HDMI 2**.

**Note**

You can connect a DVI device to the **HDMI 1** jack on the back of your TV using an HDMI-to-DVI adapter. Next connect an audio cable to the **PC IN AUDIO** jack and to the audio out jack on the DVI device. You cannot connect a DVI device to the **HDMI 2** jack on the back of your TV.

**To connect an HDMI device to the side of your TV:**

1 Connect an HDMI cable to the **HDMI 3** or **HDMI 4** jack on the side of your TV and to the **HDMI OUT** jack on the HDMI device.




2 Turn on your TV, then turn on the HDMI device.

3 Press **INPUT** to open the *Source List*, then press ▲ or ▼ to select **HDMI 3** or **HDMI 4**.

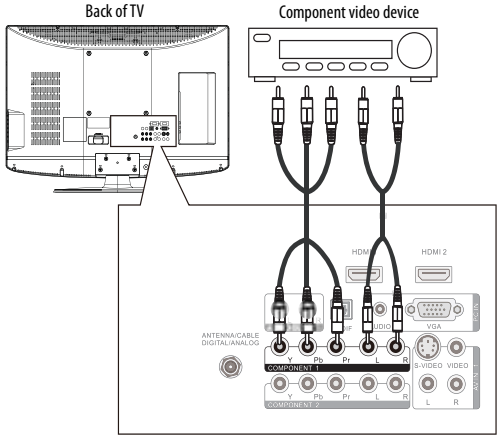
**Note**

You cannot connect a DVI device to the **HDMI 3** or **HDMI 4** jack on the side of your TV.

## Connecting a component video device

**To connect a component video device:**

1. Connect a component video cable to the **COMPONENT 1** or **COMPONENT 2 Y**, **Pb**, and **Pr** jacks on the back of your TV and to the **COMPONENT OUT** video jacks on the component video device.

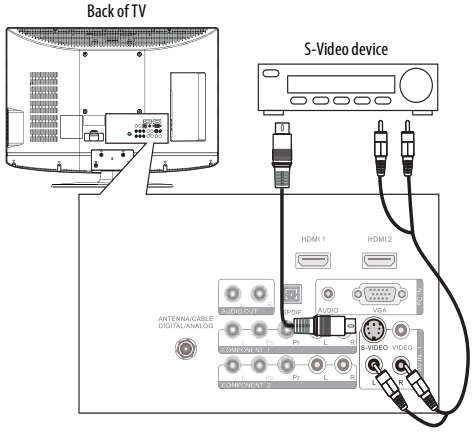



2. Connect an audio cable to the **COMPONENT 1** or **COMPONENT 2 L** and **R** audio jacks on the back of your TV and to the **COMPONENT AUDIO OUT** jacks on the component video device.
3. Turn on your TV, then turn on the component video device.
4. Press **INPUT** to open the *Source List*, then press ▲ or ▼ to select **Component 1** or **Component 2**.

## Connecting an S-Video device

**To connect an S-Video device to the back of your TV:**

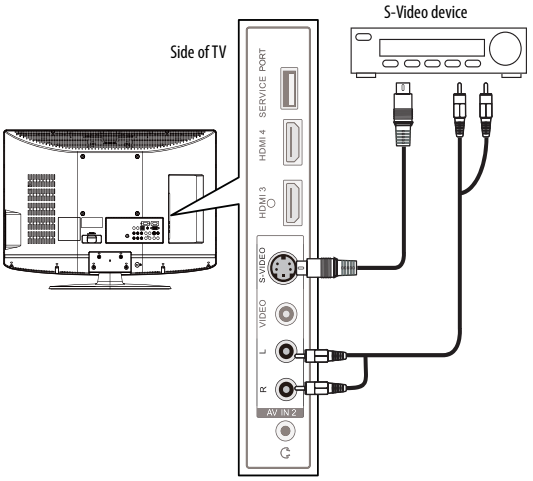
1. Connect an S-Video cable to the **AV IN 1 S-VIDEO** jack on the back of your TV and to the **S-VIDEO OUT** jack on the S-Video device.




2. Connect an audio cable to the **AV IN 1 L** and **R** jacks on the back of your TV and to the corresponding audio out jacks on the S-Video device.
3. Turn on your TV, then turn on the S-Video device.
4. Press **INPUT** to open the *Source List*, then press ▲ or ▼ to select **AV1**.

**To connect an S-Video device to the side of your TV:**

1. Connect an S-Video cable to the **AV IN 2 S-VIDEO** jack on the side of your TV and to the **S-VIDEO OUT** jack on the S-Video device.




2. Connect an audio cable to the **AV IN 2 L** and **R** audio jacks on the side of your TV and to the corresponding audio out jacks on the S-Video device.
3. Turn on your TV, then turn on the S-Video device.
4. Press **INPUT** to open the *Source List*, then press ▲ or ▼ to select **AV2**.

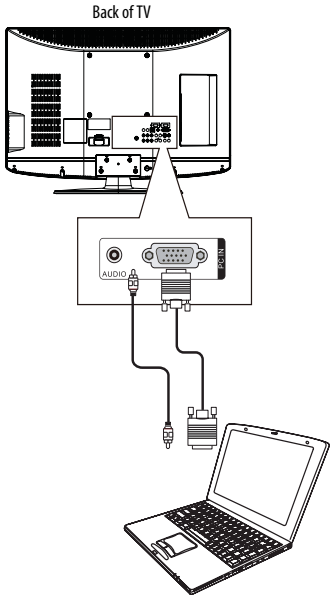
## Connecting a computer

**Note**

If the computer has an HDMI jack, you can connect it to an HDMI jack on your TV.

**To connect a computer:**

1. Connect a VGA cable to the **PC IN VGA** jack on the back of your TV and the **VGA** jack on the computer.




2. Connect an audio cable to the **PC IN AUDIO** jack on the back of your TV and to the **AUDIO OUT** jack on the computer.
3. Turn on your TV, then turn on the computer.
4. Press **INPUT** to open the *Source List*, then press ▲ or ▼ to select **VGA**.

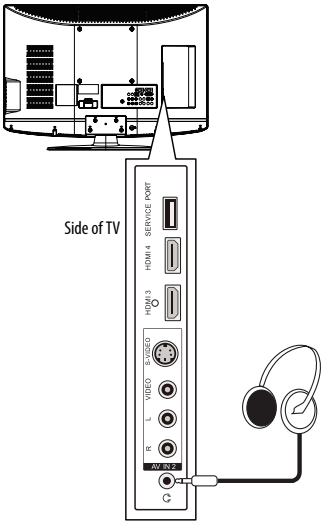
**Note**

When the computer enters standby mode, your TV turns off. If your TV does not turn on when you "wake" your computer, press ⏻ (power) on your TV or remote control.

## Connecting headphones

**To connect headphones:**

- Plug headphones into the 🎧 jack on the side of your TV.



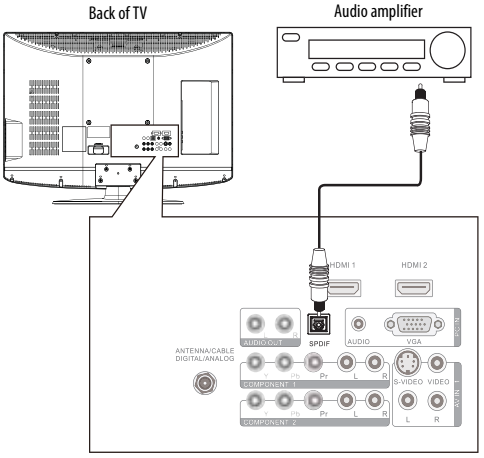

**Note**

When headphones are plugged in, the sound from your TV's speakers is muted.

## Connecting a digital audio amplifier

**To connect a digital audio amplifier:**

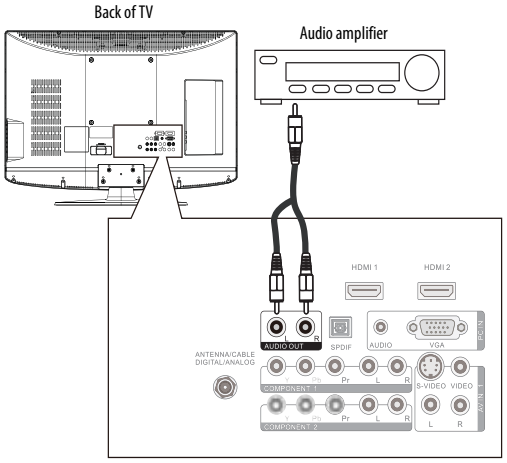
- Connect a digital audio cable to the **SPDIF** jack on the back of your TV and to the digital audio jack on the amplifier.



### Connecting an analog audio amplifier

**To connect an analog audio amplifier to your TV:**

- Connect a standard audio cable to the **AUDIO OUT L** and **R** audio jacks on the back of your TV and to the **AUDIO IN** jacks on the amplifier.

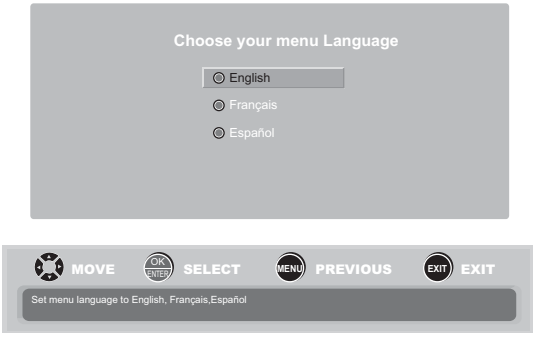



# Turning on your TV for the first time

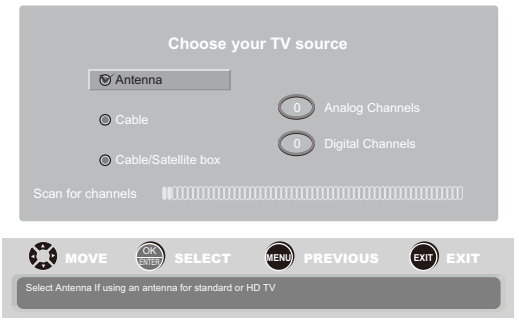
The first time you turn on your TV, the Setup Wizard opens. The Setup Wizard guides you through setting up basic settings including the menu language, TV signal source, and the channel list.

**To set up your TV:**

1. Make sure that you have:
   - Installed the remote control batteries. (See page 7 for details).
   - Connected an antenna, cable TV, or satellite TV. (See pages 8 through 10 for details.)
   - Connected the power cord. (See page 8 for details.)
2. Press ⏻ (power) to turn on your TV. The *Choose your menu Language* screen opens.




3. Press ▲ or ▼ to highlight **English**, **Français**, or **Español**, then press **OK/ENTER** to confirm your selection. The *Choose your TV source* screen opens.




4. Press ▲ or ▼ to highlight **Antenna**, **Cable**, or **Cable/Satellite box** (if your cable TV uses a box, select **Cable/Satellite box**), then press **OK/ENTER**. If you chose **Antenna** or **Cable**, your TV automatically starts scanning for channels available in your viewing area. If you chose **Cable/Satellite box**, your TV does not need to scan for channels.

   When the scan is complete, the Setup Wizard closes automatically.

**Note**

You can change the menu language or scan for channels at a later date. For more information, see "Selecting the menu language" on page 28 or "Automatically scanning for channels" on page 19.

# Understanding the basics

**Note**

Unless otherwise noted, all tasks in this section are based on using the remote control.

### Turning your TV on or off

**To turn your TV on and off:**

1. Make sure that the power cord is connected to your TV and a power outlet.
2. Press ⏻ (power) to turn on your TV. The power indicator LED turns blue.
3. Press ⏻ (power) again to turn off your TV. Your TV enters Standby mode and the power indicator LED turns red.

**Warning**

When your TV is off, power still flows into it. To disconnect power, unplug the power cord.

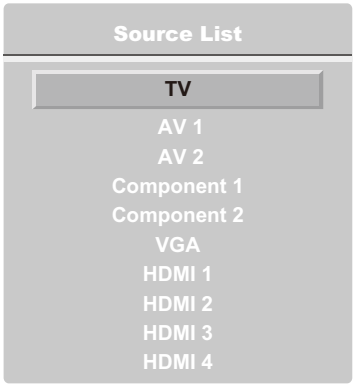
**Note**

If your TV does not detect a signal and you do not press any button for 15 minutes, your TV goes into Standby mode automatically.

## Selecting the video input source

**To select the video input source:**

1 With your TV turned on, press **INPUT**. The *Source List* opens.




2 Press ▲ or ▼ to highlight the video input source your want. You can select:

- **TV**
- **AV 1**
- **AV 2**
- **Component 1**
- **Component 2**
- **VGA**
- **HDMI 1**
- **HDMI 2**
- **HDMI 3**
- **HDMI 4**

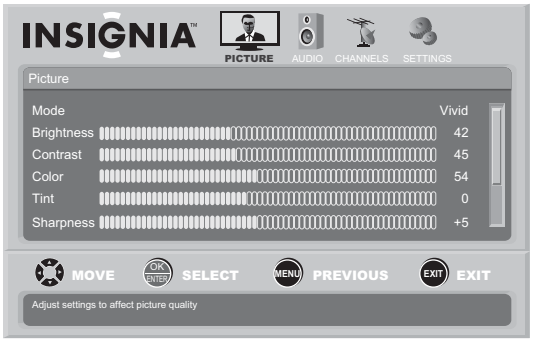
3 Press **OK/ENTER**.

You can also press a direct input button to select the video input source.

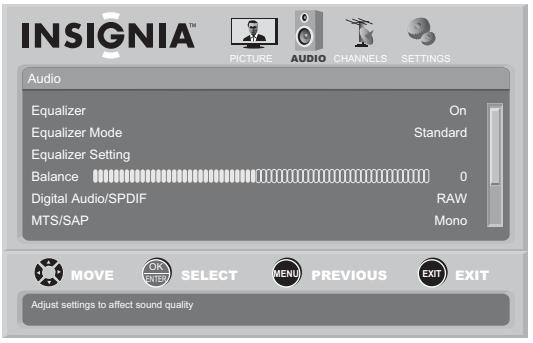
- Press **TV** to select **TV**.
- Press **VIDEO** once to select **AV 1**(for **AV1 IN VIDEO** or **AV1 IN S-VIDEO**).
- Press **VIDEO** twice to select **AV 2** (for **AV2 IN VIDEO** or **AV2 IN S-VIDEO**).
- Press **COMP** once to select **Component 1**.
- Press **COMP** twice to select **Component 2**.
- Press **HDMI** once to select **HDMI 1**.
- Press **HDMI** twice to select **HDMI 2**.
- Press **HDMI** three times to select **HDMI 3**.
- Press **HDMI** four times to select **HDMI 4**.

## On-screen menu overview

### Picture menu



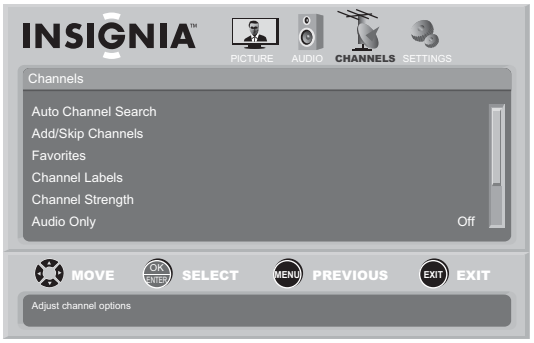

### Audio menu




**Note**

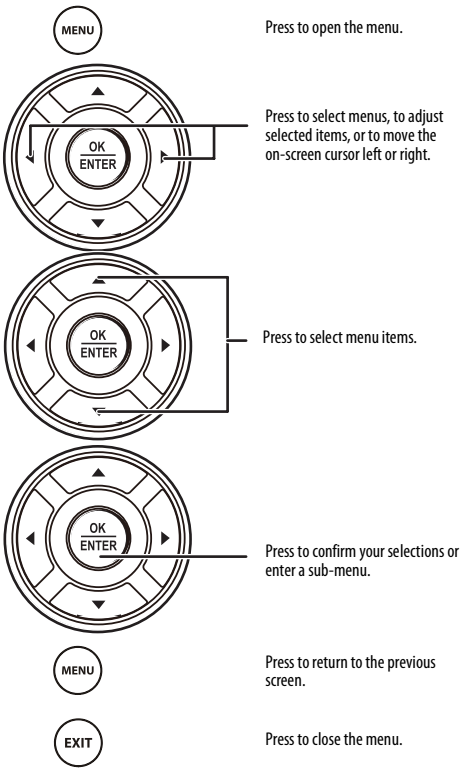
The *Audio* menu will look slightly different when the **Equalizer** setting is changed to **Off** .

### Channels menu




### Settings menu

## Navigating the menus




## Selecting a channel

**To select a channel:**

- Press **CH ▲**or **CH ▼** to go to the next higher or lower channel in the channel list.
- Press the number buttons to directly select a channel. For example, if you want to view channel 83, press **8**, then press **3**.
- Press **RECALL** to go to the last viewed channel.
- Press the number buttons for a main DTV channel, press **—**, then press the number for a DTV sub-channel to go to a digital sub-channel. For example, to go to sub-channel 1 of main channel 83, press **8**, **3**, **—**, then **1**.

**Note**

You can press the number buttons to go to a channel that was skipped in the channel scanning.

## Adjusting the volume

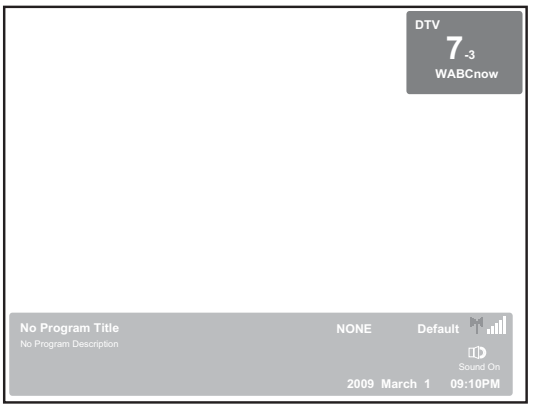
**To adjust the volume:**

- Press **VOL –** or **VOL +** to decrease or increase the volume.
- Press **MUTE** to turn off the sound. Press **MUTE** again to turn the sound back on.

## Displaying additional information

**To display additional information:**

- Press **INFO**. Your TV displays status information, such as the channel number, channel name (if available), signal source, program description, and DTV signal strength.




- Press **GUIDE** to show the digital program guide, which may show current channel name, program name, time, rating, and summaries, depending on the information provided by the broadcaster.

# Adjusting the picture

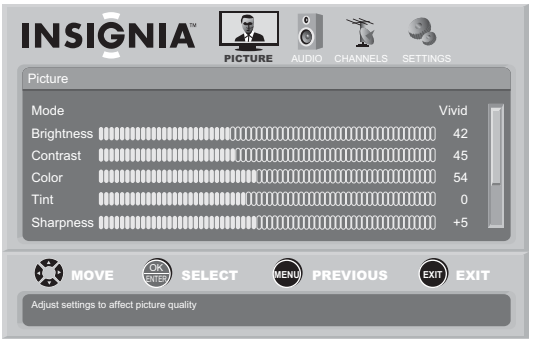
**Note**

Unless otherwise noted, all tasks in this section are based on using the remote control.

## Adjusting the TV picture

**To adjust the picture:**

1. Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2. Press ▼ to highlight an option, then press **OK/ENTER** to access the sub-menu. You can select:
   - **Mode**—Selects the picture mode. You can select **Vivid**, **Standard**, **Energy Savings**, **Theater**, **Sports**, or **Custom**.
   - **Brightness**—Adjusts the picture brightness.
   - **Contrast**—Adjusts the contrast.
   - **Sharpness**—Adjusts the sharpness.
   - **Color**—Adjusts the color saturation.
   - **Tint**—Adjusts the picture tint.

- **Advanced Video**—Opens the *Advanced Video* menu. For more information, see "Adjusting Advanced Video settings" on page 17.
- **Reset Picture Settings**—Resets all picture settings to the factory defaults. When you select this option, a confirmation box opens. Press ◄ or ► to select **Yes** or **No**, then press **OK/ENTER** to confirm.

**Note**

- You may need to scroll down to see all the options.
- If you adjust **Brightness**, **Contrast**, **Color**, **Tint**, or **Sharpness** in **Vivid**, **Standard**, **Energy Savings**, **Theater**, or **Sports** mode, your TV switches to **Custom** mode automatically.

3 Press ◄ or ► to modify a scale or to move from left to right to make a choice in a submenu. Press ▲ or ▼ to move up or down when selecting from a list of choices in a submenu.

4 Press **MENU** to go to the previous menu or **EXIT** to close the menu.

## Adjusting Advanced Video settings

**To adjust advanced video settings:**

1 On the *Picture* menu, press ▲ or ▼ to highlight **Advanced Video**, then press **OK/ENTER** or ►. The *Advanced Video* menu opens.

2 Press ▼ to highlight an option, then press **OK/ENTER** to access the sub-menu. You can select:

- **Aspect Ratio**—Selects the aspect ratio. You can select **Normal**, **Zoom**, **Wide**, **Cinema**, or **Auto**. **Auto** is only available under TV mode and when **Auto Zoom** on the *Channels* menu is set to **On**. In VGA mode or HDMI mode when a computer is connected to the HDMI jack, only **Wide** and **Normal** are available.
- **Color temperature**—Selects the color temperature to change the overall color of the picture. You can select **Cool**, **Normal**, or **Warm**.
- **Backlight**—Controls the overall brilliance of the screen. You can adjust the backlight through a range of 0~30.
- **Noise Reduction**—Controls video noise. You can select **Off**, **Low**, **Middle**, or **High**.
- **Advanced Contrast**—When you see the pop-up menu, set **Adaptive Contrast** to **On** to adjust picture detail and brightness automatically or set **Dynamic Contrast** to **On** to automatically adjust the contrast between the light and dark areas of the picture.

3 Press ◄ or ► to modify a scale or to move from left to right to make a choice in a submenu. Press ▲ or ▼ to move up or down when selecting from a list of choices in a submenu.

4 Press **MENU** to go to the previous menu or **EXIT** to close the menu.

## Freezing the picture

**To freeze the picture:**

- Press **FREEZE**. Press again to unfreeze the picture.

**Caution**

Do not freeze the picture for long periods of time. You may damage your TV's screen.

# Adjusting the sound

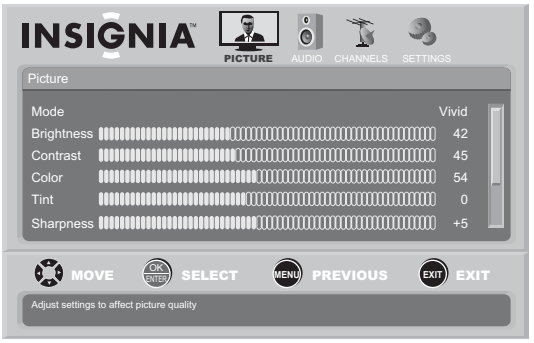
**Note**

Unless otherwise noted, all tasks in this section are based on using the remote control.

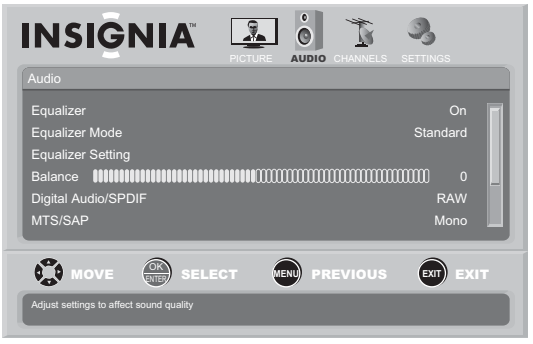
## Adjusting the sound

**To adjust the sound:**

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2 Press ◄ or ► to select **AUDIO**. The *Audio* menu opens.




3 Press ▼ to highlight **Equalizer**, then press **OK/ENTER** to open the submenu

4 Press ▲ or ▼ to select **On** or **Off**, then press **OK/ENTER** to return to the Audio menu.

The **Equalizer** setting affects other settings you can adjust.

5 Press ▼ to highlight an option, then press **OK/ENTER** to access the sub-menu. You can select:

- **Equalizer** (*set to **Off***)—You can adjust the following options by pressing ▲ or ▼ to select the option:
  - **Treble**—Adjusts high frequency sound.
  - **Bass**—Adjusts low frequency sound.
  - **SRS TruSurround HD**—Provides the ultimate home theater sound solution. You can select **On** or **Off**.

**Note**

If **SRS TruSurround HD** is set to **On** and you set **Equalizer** to **On** again, **SRS TruSurround HD** will be set to **Off** automatically.

- **Equalizer** (*set to **On***)—You can adjust the following options by pressing ▲ or ▼ to select the option:
  - **Equalizer Mode**—Selects the equalizer mode. You can select **Custom**, **Standard**, **Theater**, **Music**, and **News**. Press **OK/ENTER** after you make your selection.
  - **Equalizer Settings**—Sets the equalizer frequency. You can select **120Hz**, **500Hz**, **1.5kHz**, **5kHz**, or **10kHz**. Press ▲ or ▼ to adjust the settings. Press ◄ or ► to switch between columns. Press **MENU** to confirm the settings.

You can adjust the following options regardless of the **Equalizer** setting:

- **Balance**—Adjusts the sound between the left and right speakers.
- **Digital Audio/SPDIF**—Sends digital audio to an external audio system. You can select **RAW** or **PCM**.
- **MTS/SAP**—Selects the sound mode (for analog channel only).
  - **Mono**—Produces a clearer sound if stereo sound is difficult to hear.
  - **Stereo**—Produces dynamic stereo sound for sporting events and concerts.
  - **SAP**—Selects a second language, weather, or added commentary, if available.
- **Audio Language**—Selects the audio language based on the languages supported by a DTV channel.
- **Auto Volume**—Automatically adjusts volume to be consistent across programs and channels. You can select **On** or **Off**.
- **Reset Audio Settings**— Resets all audio settings to factory defaults. When you select this option, a confirmation box opens. Press ◄ or ► to select **Yes** or **No**, then press **OK/ENTER** to confirm.

6 Press ◄ or ► to modify a scale or to move from left to right to make a choice in a submenu. Press ▲ or ▼ to move up or down when selecting from a list of choices in a submenu.)

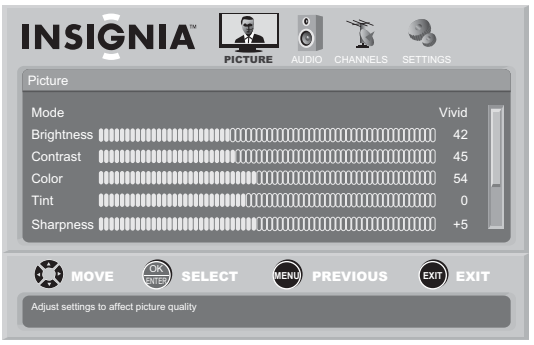
7 Press **MENU** to go to the previous menu or **EXIT** to close the menu.

## Playing TV audio only

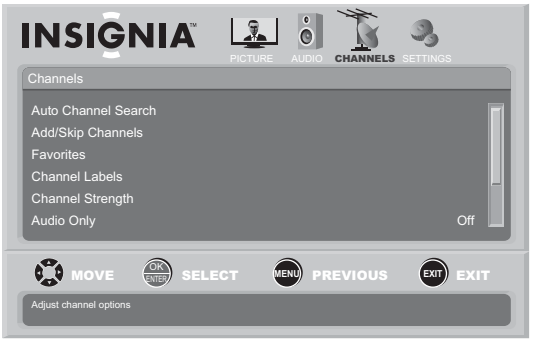
When watching TV, you can turn off the TV picture and listen to the audio only.

**To play TV audio only:**

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2 Press ◄ or ► to select **CHANNELS**. The *Channels* menu opens.




3 Press ▼ to highlight **Audio Only**, then press **OK/ENTER** or ► to access the sub-menu.

4 Press ▲ or ▼ to select **On** or **Off**.

**Note**

- It takes about 3 seconds after the menu closes and the picture disappears before the audio plays.
- **Audio Only** works only when the input source is TV and your TV is receiving a broadcast signal.
- To exit **Audio Only** mode, press any button. When you exit **Audio Only** mode, the **Audio Only** option is automatically reset to Off.

# Changing channel settings

**Note**

Unless otherwise noted, all tasks in this section are based on using the remote control.

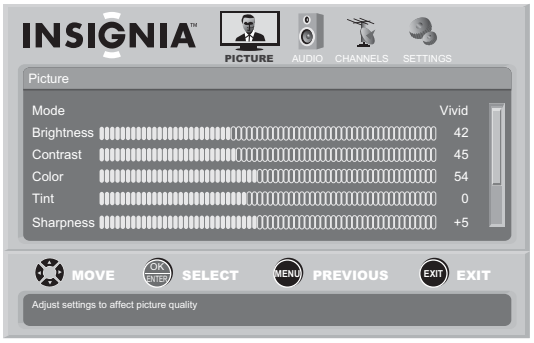
## Automatically scanning for channels

When you scan for channels, your TV searches for channels with signals and stores the channel information in the channel list. When you press **CH ▲** or **CH ▼**, your TV goes to the next or previous channel in the channel list and skips the channels that do not have signals.

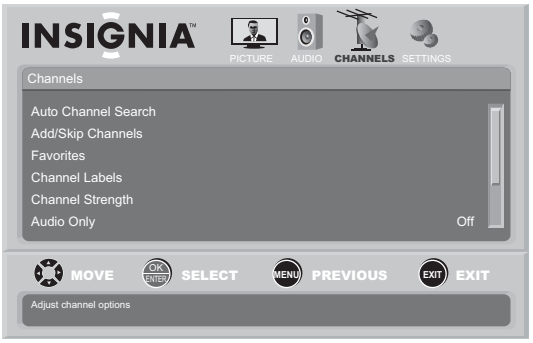
If the TV signal source changes, for example you change from an outdoor antenna to cable TV (no box), you need to scan for channels.

**To automatically scan for channels:**

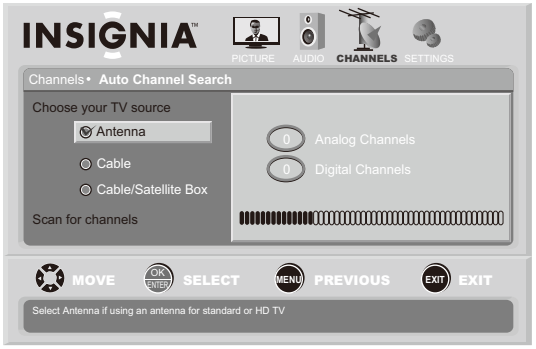
1. Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2. Press ◄ or ► to select **CHANNELS**. The *Channels* menu opens.




3. Press ▼ to highlight **Auto Channel Search**, then press **OK/ENTER** or ► to open the *Auto Channel Search* screen.




4. Press ▼ to highlight **Antenna**, **Cable**, or **Cable/Satellite Box**, then press **OK/ENTER** to start the scan. You can see the search progress and how many channels are found in the on-screen menu. After the scan is complete, the menu closes and your TV tunes to the first channel in the list.

**Note**

You can press **EXIT** to stop the search.

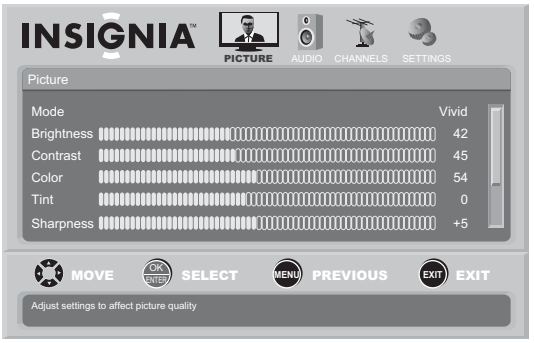
If you select **Cable/Satellite Box**, your TV will not scan for channels because the available channels are provided by the box. Press **EXIT** to close the menu.

## Hiding channels

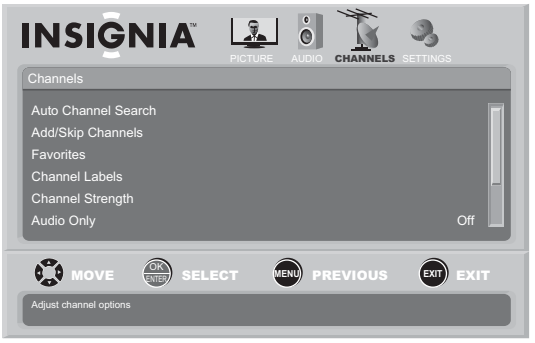
You can hide channels in the channel list. When you press **CH ▲** or **CH ▼**, your TV will skip the hidden channels. You can still tune to a hidden channel by pressing the number buttons for the channel.

**To hide channels:**

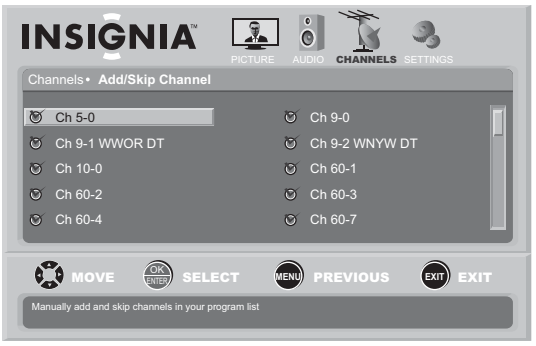
1. Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2. Press ◄ or ► to select **CHANNELS**. The *Channels* menu opens.



3 Press ▼ to highlight **Add/SKIP**, then press **OK/ENTER** or ► to open the *Channel Lists* screen.




4 Press ◄ ► ▲ or ▼ to highlight the channel you want to hide, then press **OK/ENTER** to uncheck the highlighted channel. You can add a channel to the list by highlighting a channel and checking it.

5 Repeat Step 4 to hide additional channels.

6 Press **MENU** to return the previous menu, or press **EXIT** to close the menu.

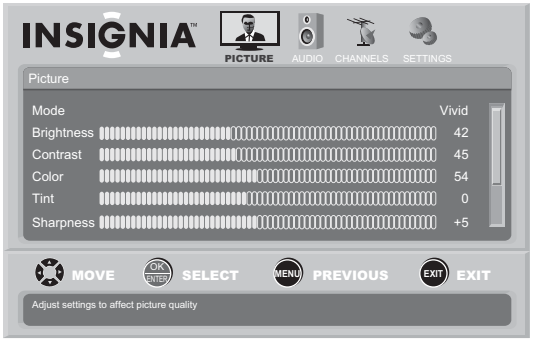
**Note**

Depending on how many channels are in the channel list, you may need to press ▲ or ▼ to scroll to the next or previous page of channels.

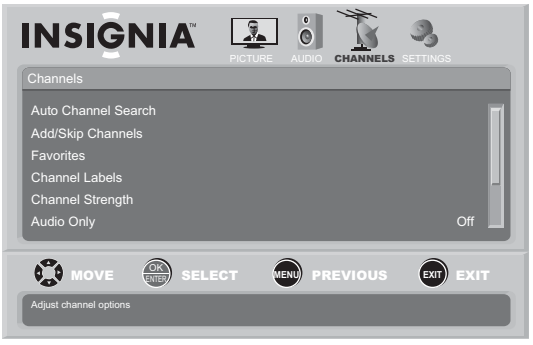
## Setting up a favorite channel list

### To set up a favorite channel list:

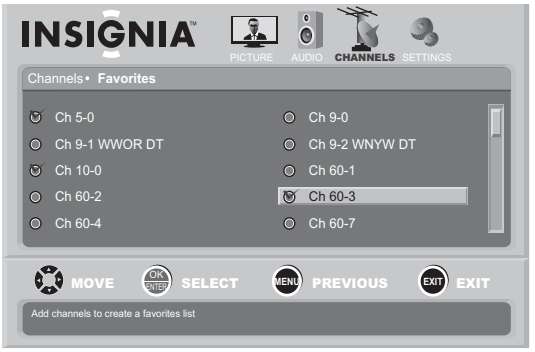
1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2 Press ◄ or ► to select **CHANNELS**. The *Channels* menu opens.




3 Press ▼ to highlight **Favorites**, then press **OK/ENTER** or ► to open the *Favorites* screen.




4 Press ◄ ► ▲ or ▼ to highlight the channel you want to add to the *Favorites* list, then press **OK/ENTER** to check the highlighted channel. You can remove a channel from the list by highlighting the channel and unchecking it.

5 Repeat Step 4 to add additional channels.

6 Press **MENU** to return the previous menu, or press **EXIT** to close menu.

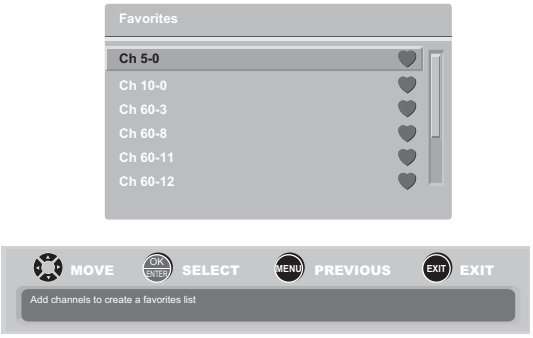
**Note**

Depending on how many channels are in the *Favorites* list, you may need to press ▲ or ▼ to scroll to the next or previous page of channels.

## Viewing a favorite channel

### To view a favorite channel:

1 Press **FAV** to open the *Favorites* list.




2 Press ▲ or ▼ to highlight the channel you want to watch, then press **OK/ENTER** to tune to the channel.

3 Press **EXIT** to close the *Favorites* list.

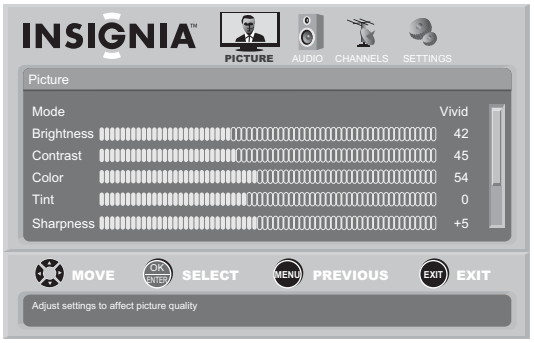
**Note**

Depending on how many channels are in the *Favorites* list, you may need to press ▲ or ▼ to scroll to the next or previous page of channels.

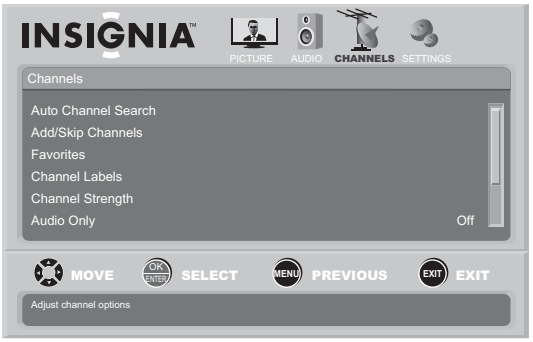
## Adding or changing a channel label

**To add or change a channel label:**

1. Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2. Press ◄ or ► to select **CHANNELS**. The *Channels* menu opens.



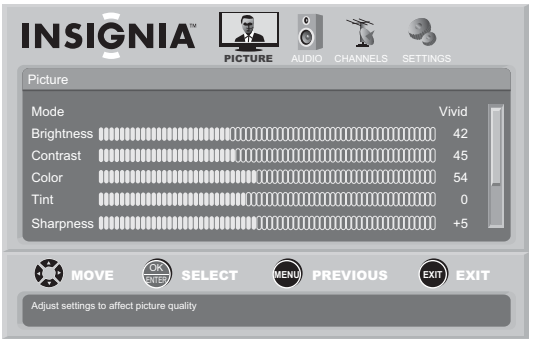

3. Press ▼ to highlight **Channel Labels**, then press **OK/ENTER** or ► to open the *Channel Labels* screen.

4. Press ▲ or ▼ to select the channel you want to add a label to or change the label for, then press ► to move the cursor to label selection field.
5. Press ▲ or ▼ to select a letter, then press ► to go to the next letter. Repeat this step to add additional letters. You can add as many as 11 letters.
6. Press **OK/ENTER** to confirm the label.
7. Press ◄ or ► to check **Yes** or **No**, then press **OK/ENTER** to confirm.
8. Press **MENU** to go to the previous menu, or press **EXIT** to close the menu.

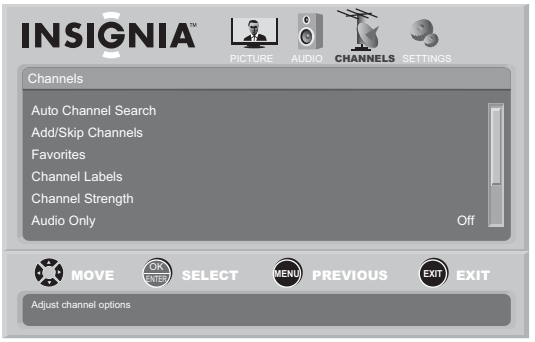
## Checking the DTV signal strength

**To check the DTV signal strength:**

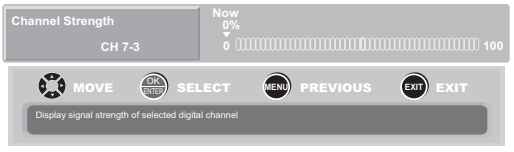
1. Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2. Press ◄ or ► to select **CHANNELS**. The *Channels* menu opens.




3. Press ▼ to highlight **Channel Strength**, then press **OK/ENTER** or ► to open the DTV signal meter.




4. Press **MENU** to go to the previous menu, or press **EXIT** to close the menu.

**Note**

When you are tuned to a DTV channel, you can press **INFO** to see the DTV signal strength.

# Setting parental controls

**Note**

Unless otherwise noted, all tasks in this section are based on using the remote control.

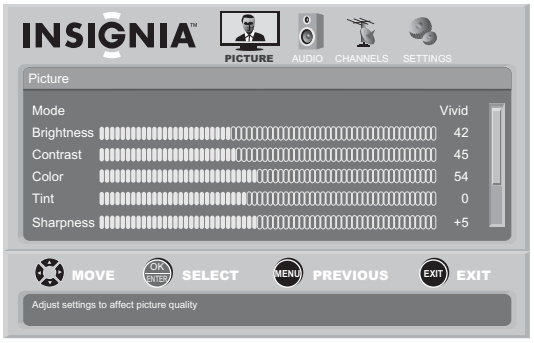
## Setting or changing the password

Your TV has a V-chip that lets you control the type of programs your children can watch. Parental controls include two ratings: MPAA (based on age) and TV Parental Guidelines (based on content and age). A TV program may have an MPAA or TV Parental Guidelines rating, so you should set controls for both ratings.

Before you can select ratings, you need to set up a parental controls password.

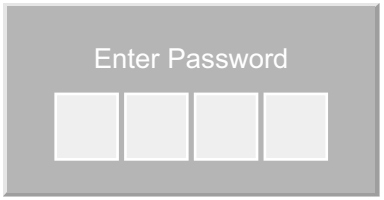
**To set up a password:**

1. Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.



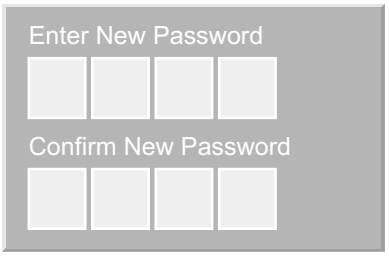

2. Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

3. Press ▼ to highlight **Parental Controls**, then press **OK/ENTER** or ►. The *Enter Password* screen opens.




4. Press the number buttons to enter the password. If you have not set a password, enter **0000**. The *Parental Controls* menu opens.

5. Press ▲ or ▼ to highlight **Change Password**, then press **OK/ENTER** or ►. The *Enter New Password* screen opens.




6. Press the number buttons to enter the new password, then enter the new password again.

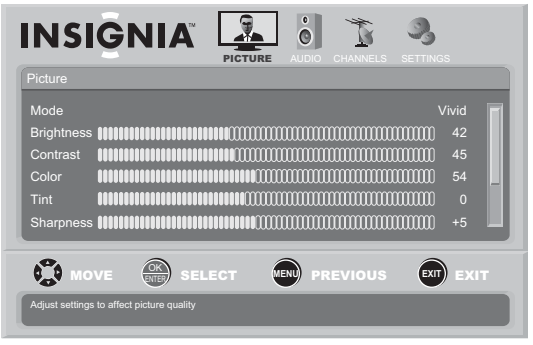
**Note**

Write down your password and save it for future use. If you forget your password, enter **9999** as the password. This password always remains valid for resetting your password.

## Setting parental control levels

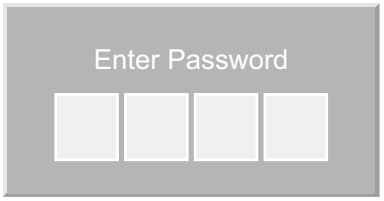
**To set parental control levels:**

1. Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.



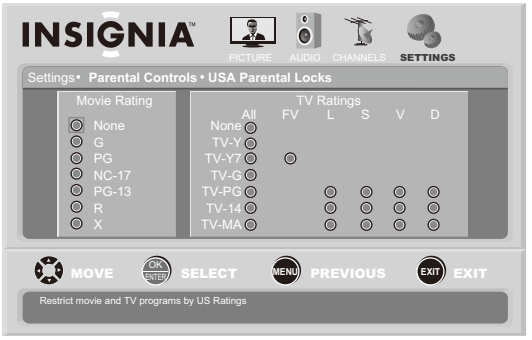
2 Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

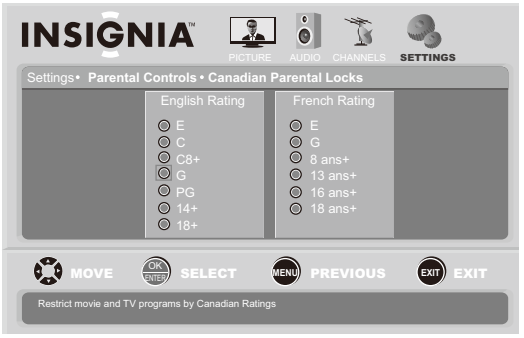
3 Press ▼ to highlight **Parental Controls**, then press **OK/ENTER** or ►. The *Enter Password* screen opens.




4 Press the number buttons to enter the password. If you have not set a password, enter **0000**. The *Parental Controls* menu opens.

5 Press ▲ or ▼ to highlight **USA Parental Locks** or **Canadian Parental Locks**, then press **OK/ENTER** or ► to open the *USA Parental Locks* or *Canadian Parental Locks* screen.




6 Press ◄ ► ▲ or ▼ to highlight a rating, then press **OK/ENTER** to block or unblock the rating. When you block a rating, that rating and all higher ratings are blocked.

7 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

**Note**

When you first set parental controls, they take effect immediately.

If you have set parental controls then tune to a blocked channel or program, you are prompted to enter the password. After you enter the password, parental controls are tuned off.

To turn parental controls back on, you need to turn off your TV. When you turn it back on, parental controls are turned back on.

| U.S. TV ratings | |
|---|---|
| NONE | Not rated |
| TV-Y | All children |
| TV-Y7 | Children over seven years of age |
| TV-G | General audiences |
| TV-PG | Parental guidance suggested |
| TV-14 | Parents strongly cautioned |
| TV-MA | Mature audiences only |

Some of the age-based TV Parental Guidelines ratings also have content-based ratings.

| U.S. TV content ratings | |
|---|---|
| FV | Fantasy violence |
| L | Adult language. |
| S | Sexual situations. |
| V | Violence. |
| D | Sexually suggestive dialog. |

| U.S. movie (MPAA) ratings | |
|---|---|
| G | General audiences |
| PG | Parental guidance suggested |
| PG-13 | Suitable for children 13 and older |
| R | Parental guidance suggested for children under 17 |
| NC-17 | Not suitable for children under 17 |
| X | Adults only |
| N/A | Movie not rated. |

| Canadian English ratings | |
|---|---|
| E | Exempt programming |
| C | Children |
| C8+ | Children over 8 years old |
| G | General audiences |
| PG | Parental guidance |
| 14+ | Over 14 years old |
| 18+ | Adult programming |

| Canadian French ratings | |
|---|---|
| E | Exempt programming |
| G | General audiences |
| 8ans+ | Over 8 years old |
| 13ans+ | Over 13 years old |
| 16ans+ | Over 16 years old |
| 18ans+ | Over 18 years old, only for adult viewing |

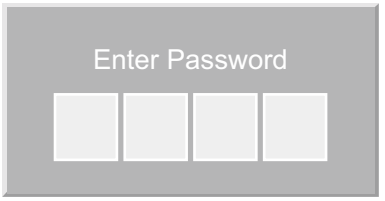
## Blocking unrated TV

**To block unrated TV:**

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.

2 Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

3 Press ▼ to highlight **Parental Controls**, then press **OK/ENTER** or ►. The *Enter Password* screen opens.




4 Press the number buttons to enter the password. If you have not set a password, enter **0000**. The *Parental Controls* menu opens.

5 Press ▼ to highlight **Block Unrated TV**, then press **OK/ENTER** or ► to access the sub-menu.

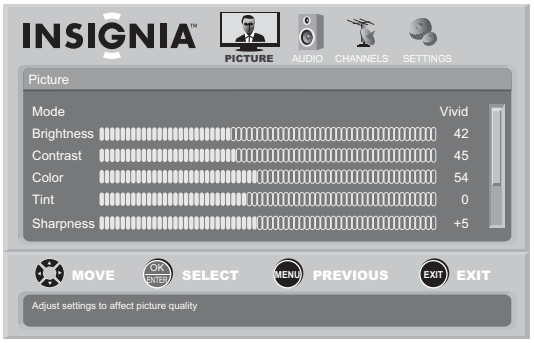
6 Press ▲ or ▼ to select **On** (blocks unrated TV) or **Off** (does not block unrated TV).

7 Press **MENU** to go to the previous menu or **EXIT** to close the menu.

## Downloading rating information

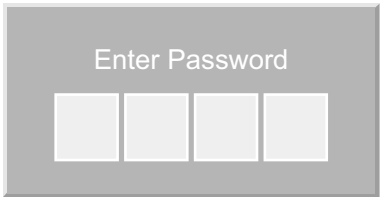
**To download rating information:**

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2 Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

3 Press ▼ to highlight **Parental Controls**, then press **OK/ENTER** or ►. The *Enter Password* screen opens.




4 Press the number buttons to enter the password. If you have not set a password, enter **0000**. The *Parental Controls* menu opens.

5 Press ▲ or ▼ to scroll down the list of options and highlight **RRT5**.

6 Press **OK/ENTER** or ► to open the *RRT5* screen.

7 Press ▼ to highlight an option, then press **OK/ENTER** or ► to open the sub-menu.

8 Press ▲ or ▼ to select a rating.

9 Press **MENU** to go to the previous menu or **EXIT** to close the menu.

**Note**

If the program is broadcasted with RRT5 rating information, the information is downloaded automatically and can be used for parental controls.

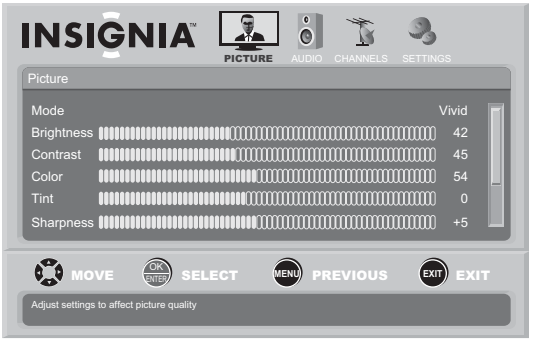
If the program is not broadcasted with RRT5 rating information, no information is downloaded.

## Locking control buttons

You can lock the control buttons on the TV. When the buttons are locked, you can only operate the TV using the remote control.

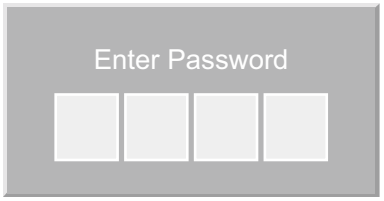
**To lock control buttons:**

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2 Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

3 Press ▼ to highlight **Parental Controls**, then press **OK/ENTER** or ▶. The *Enter Password* screen opens.




4 Press the number buttons to enter the password. If you have not set a password, enter **0000**. The *Parental Controls* menu opens.

5 Press ▼ to highlight **Button Lock**, then press **OK/ENTER** or ▶ to access the sub-menu.

6 Press ▲ or ▼ to select **On** or **Off**.

7 Press **MENU** to go to the previous menu or **EXIT** to close the menu.

# Using closed captioning

**Note**

Unless otherwise noted, all tasks in this section are based on using the remote control.

## Viewing closed captioning

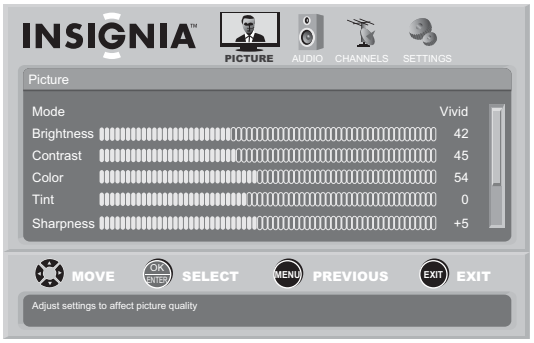
**To view closed captions:**

- Press **CCD** to select **CC Off**, **CC On**, or **CC On When Mute**.

## Selecting the closed captioning mode

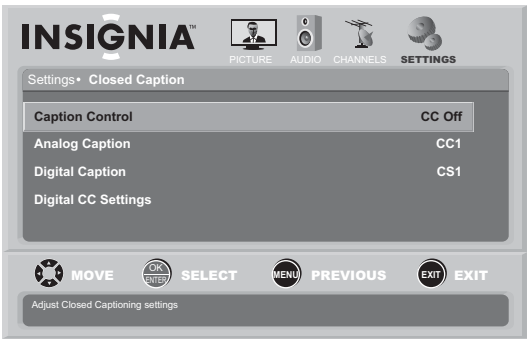
**To select the closed captioning mode:**

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2 Press ◀ or ▶ to select **SETTINGS**. The *Settings* menu opens.

3 Press ▼ to highlight **Closed Caption**, then press **OK/ENTER** or ▶ to open the *Closed Caption* menu.




4 Press ▲ or ▼ to highlight **Analog Caption** or **Digital Caption**, then press **OK/ENTER** or ▶ to open the sub-menu.

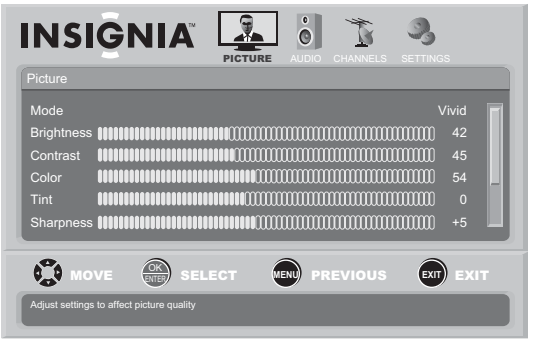
5 Press ▲ ▼ ◀ or ▶ to select a setting.

6 Press **MENU** to go to the previous menu or **EXIT** to close the menu.

## Customizing DTV closed captioning styles

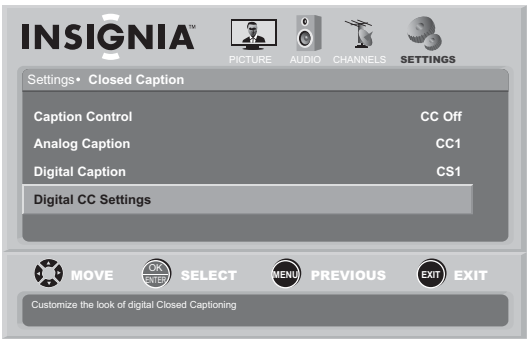
**To customize DTV closed captioning styles:**

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.

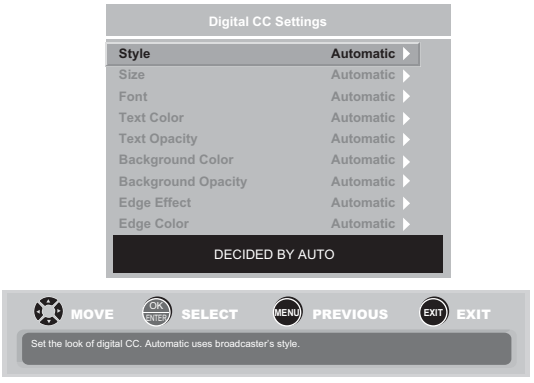


2 Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

3 Press ▼ to highlight **Closed Caption**, then press **OK/ENTER** or ► to open the *Closed Caption* screen.




4 Press ▲ or ▼ to highlight **Digital CC Settings**, then press **OK/ENTER** or ► to open the *Digital CC Settings* menu.




5 Press ▼ to highlight an option, then press ◄ or ► to adjust the option. You can select:

- **Style**—Selects the Digital Closed Caption style.
- **Size**—Selects the font size.
- **Font**—Selects the font type.
- **Text Color**—Selects the text color.
- **Text Opacity**—Selects the text opacity.
- **Background Color**—Selects the background color.
- **Background Opacity**—Selects the background opacity.
- **Edge Effect**—Selects the edge style.
- **Edge Color**—Selects the edge color.

6 Press ◄ or ► to adjust the option.

7 Press **MENU** to go to the previous menu or **EXIT** to close the menu.

**Note**

The default of **Digital CC Settings** is **Automatic**. All other settings will be available only when **Style** is set to **Custom**.

# Adjusting time settings

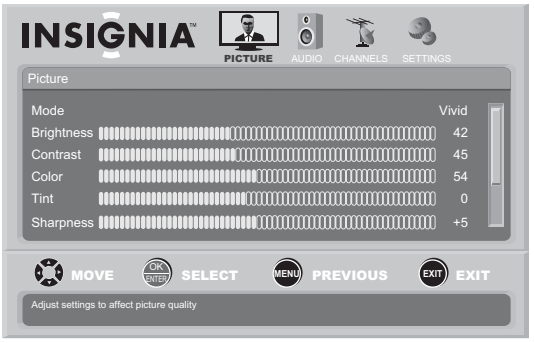
**Note**

Unless otherwise noted, all tasks in this section are based on using the remote control.

## Setting the clock

**To set the clock:**

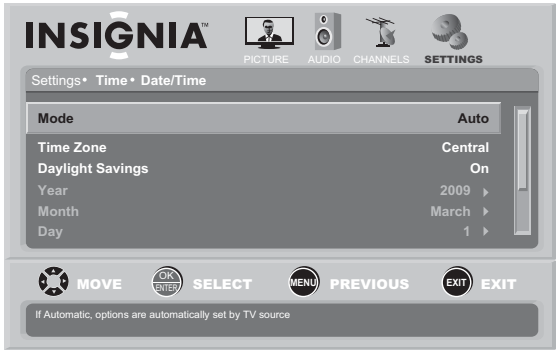
1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2 Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

3 Press ▼ to highlight **Time**, then press **OK/ENTER** or ► to open the *Time* menu.

4 Press ▲ or ▼ to highlight **Date/Time**, then press **OK/ENTER** to open the *Date/Time* screen.




5 Press ▲ or ▼ to highlight the option you want to adjust, then press **OK/ENTER** or ► open the setting screen, or if the option has a ►, press ◄ or ► to adjust the setting.

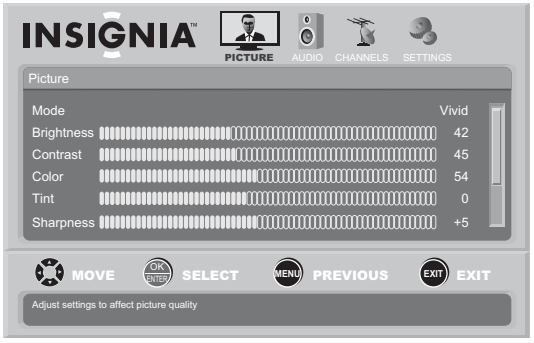
6 Press **MENU** to go to the previous menu, or press **EXIT** to close the menu.

**Note**

If **Mode** is set to **Auto**, the date and time are set based on a time signal received from a DTV channel, and the only options you can adjust are **Time Zone** and **Daylight Savings**.

## Setting the sleep timer

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2 Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

3 Press ▼ to highlight **Time**, then press **OK/ENTER** or ► to open the *Time* menu.

4 Press ▲ or ▼ to highlight **Sleep Timer**, then press **OK/ENTER** to open the sleep timer list.

5 Press ▲ or ▼ to select the amount of time you want your TV to wait before it automatically turns off.

6 Press **MENU** to go to the previous menu or **EXIT** to close the menu.

**Note**

You can also press **SLEEP** one or more times to set the sleep timer. You can select Off, 5, 10, 15, 30, 60, 90, 120, 180, or 240 minutes.

# Adjusting menu settings

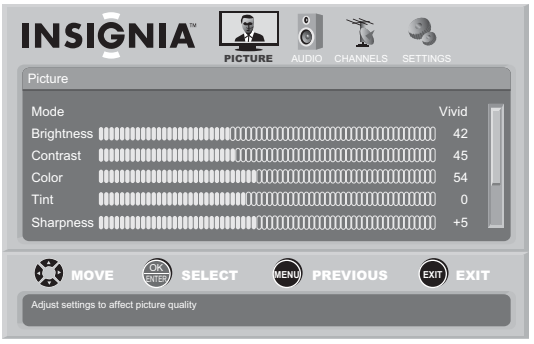
**Note**

Unless otherwise noted, all tasks in this section are based on using the remote control.

## Selecting the menu language

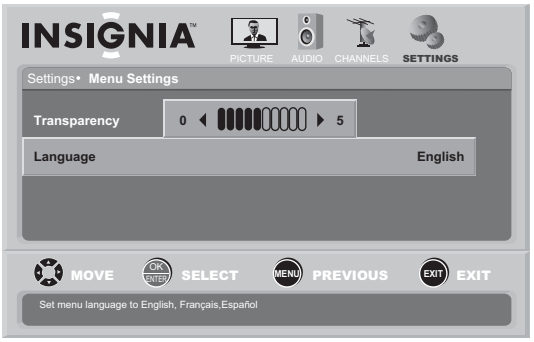
**To select the menu language:**

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.

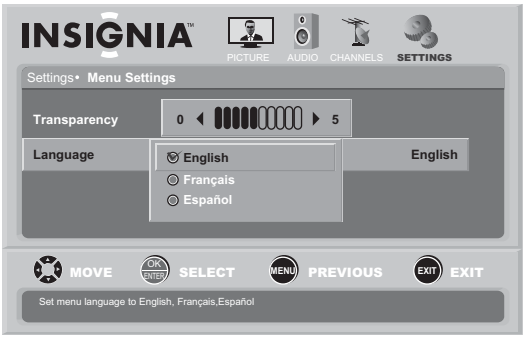



2 Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

3 Press ▼ to highlight **Menu Settings**, then press **OK/ENTER** or ▶ to open the sub-menu.




4 Press ▼ to highlight **Language**, then press **OK/ENTER** or ▶ to open the sub-menu.



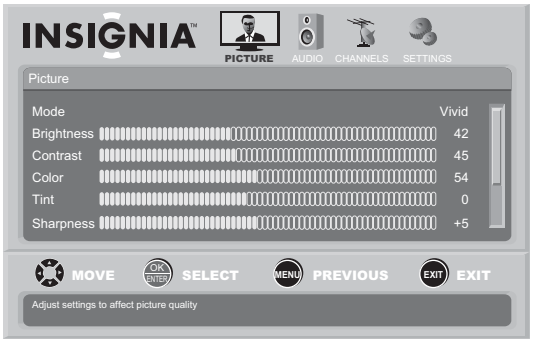

5 Press ▲ or ▼ to select a language.

6 Press **MENU** to go to the previous menu or press **EXIT** to close the menu.

## Changing the menu transparency

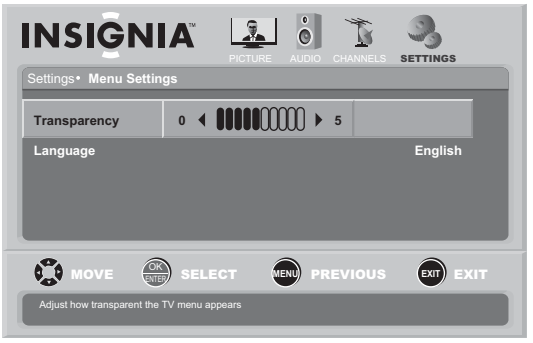
### To change the menu transparency:

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2 Press ◀ or ▶ to select **SETTINGS**. The *Settings* menu opens.

3 Press ▼ to highlight **Menu Settings**, then press **OK/ENTER** or ▶ to open the sub-menu.



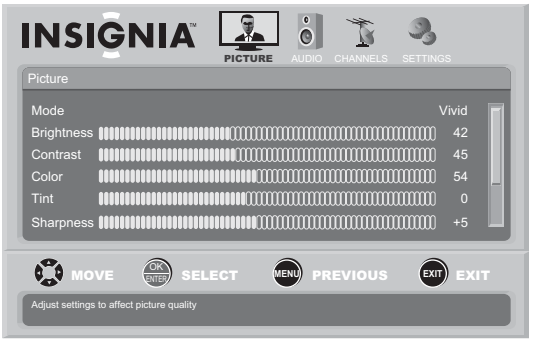

4 Press ▼ to highlight Transparency, ◀ or ▶ to change the transparency.

5 Press **MENU** to go to the previous menu or press **EXIT** to close the menu.

## Labeling an input source

### To change input labels:

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.



2 Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

3 Press ▼ to highlight **Input labels**, then press **OK/ENTER** or ► to open the *Input Labels* screen.

4 Press ▲ or ▼ to select the input you want to change the label for (for example, **AV 1**).

5 Press ► to move the cursor to the label selection field.

6 Press ▲ or ▼ to select the label you want (**—**, **VCR**, **DVD**, **Set Top Box**, **Satellite**, **Cable Box**, **DVD/PVR**, **BD**, **HD**, **Game**, **Camcorder**, **Receiver**, **PC**, or **Other**), then press **OK/ENTER** to confirm the change.

7 Press ◄ or ► to check **Yes** or **No**, then press **OK/ENTER** to confirm.

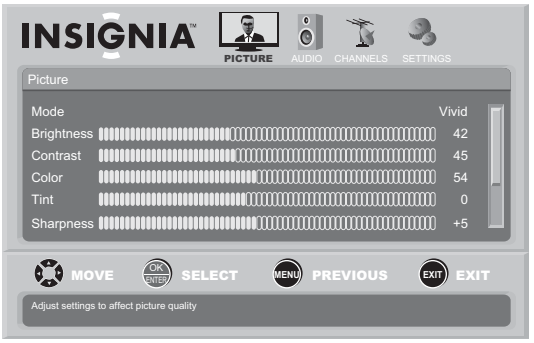
8 To change another input label, press ◄ to move the cursor to the input selection field, then repeat step 4 to step 7.

9 Press **MENU** to go to previous menu or press **EXIT** to close the on-screen menu.

## Resetting settings to the defaults

**To reset settings to the defaults:**

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.




2 Press ◄ or ► to select **SETTINGS**. The *Settings* menu opens.

**Note**

You may need to scroll down to see the **Reset to Default** option.

3 Press ▼ to highlight **Reset to Default**, then press **OK/ENTER** to confirm.

4 Press **MENU** to go to the previous menu or press **EXIT** to close the menu.

# Maintaining

- Do not use your TV in areas that are too hot or too cold, because the cabinet may warp or the screen may malfunction. Your TV works best in temperatures that are comfortable to you.
- Storage temperatures are 32° to 122°F (0° to 50°C).
- Working temperatures are 41° to 104°F (5° to 40°C).
- Do not place your TV in direct sunlight or near a heat source.

### Cleaning the TV cabinet

Clean the cabinet with a soft, lint-free cloth. If the cabinet is especially dirty, moisten a soft, lint-free cloth in a weak detergent solution, squeeze the excess moisture from the cloth, then wipe the screen or cabinet with the cloth. Use a clean cloth to dry the screen or cabinet.

### Cleaning the TV screen

Clean the screen with a soft, lint-free cloth.

# Troubleshooting

**Warning**

Do not try to repair your TV yourself. Refer all service to a qualified service technician.

| | |
|---|---|
| No power | • Make sure that the power cord is correctly connected to your TV and a power outlet.<br>• Unplug the power cord, wait 60 seconds, then plug the cord back in and turn on your TV. |
| No picture | • Make sure that **Audio Only** option is set to **Off**. For more information, see "Playing TV audio only" on page 18.<br>• Make sure that the video cables are connected securely to the back of your TV.<br>• Adjust the contrast and brightness.<br>• Make sure that the correct video mode is selected.<br>• Make sure that the incoming signal is compatible.<br>• Make sure the antenna is connected correctly.<br>• Check the closed caption settings. Some TEXT modes can block the screen. |
| Good picture but no sound | • Increase the volume.<br>• Make sure that the sound is not muted.<br>• Make sure that the correct audio mode is selected. |
| Good sound but poor color | • Adjust the contrast, color, and brightness settings. |
| Poor picture | • Make sure that the room is not too bright. Light reflecting off the screen can make the picture difficult to see.<br>• If an S-VHS camera or a camcorder is connected while another connected device is turned on, the picture may be poor. Turn off one or more devices. |
| Horizontal dotted line | • Your TV may be too close to another electrical device, such as a hair dryer or neon light. Turn off the device or move your TV. |
| "Ghost" or double image | • This may be caused by obstructions to the antenna, such as high-rise buildings or hills. Use of a highly directional antenna may improve the picture quality. |
| Remote control does not work | • Replace the batteries. Make sure that the + and – symbols on the batteries align with the + and – symbols in the battery compartment.<br>• Clean the remote sensor on the front of your TV.<br>• Bright or fluorescent lighting may interfere with the remote control signal. Turn off the light or move your TV. |
| Snowy picture or noise | • Make sure that the A/V and antenna cables are connected correctly and securely. |
| VGA picture is not stable or synchronized | • Make sure that you have selected the correct VGA mode on your computer. |
| No output from one of the speakers | • Adjust the balance in the *Audio* menu. |
| Control buttons do not work | • Make sure that the **Button Lock** option is set to Off. For more information, see "Locking control buttons" on page 25.<br>• Unplug the power cord, wait a few seconds, then plug the cord back in and turn on your TV. |
| After images appear | • Do not display a still image, such as a logo, game, or computer image, for an extended period of time. This can cause a permanent after-image to be burned into the screen. This type of damage is not covered by your warranty. |
| Picture has a few bright or dark dots | • A few bright or dark dots on an LCD screen is normal. It does not affect the operation of this TV. |

# Specifications

Design and specifications are subject to change without notice.

| | |
|---|---|
| Analog standard | NTSC |
| Digital standard | ATSC, 8-VSB, Clear-QAM |
| Screen | 47″ |
| Channel coverage | VHF: 2-13<br>UHF: 14-69<br>CATV: Mid band - A-8 ~ A-1, A ~ I<br>Super band - J ~ W<br>Hyper band - AA ~ ZZ, AAA, BBB<br>Ultra band - 65 ~ 94, 100 ~ 135 |
| Power source | AC 120 V ~ 60 Hz |
| Power consumption | 260 Wwith TV on<br><1 W in standby mode |
| Audio power | 10 W + 10 W internal speaker |
| S-Video input (2) | Y: 1 V (p-p), 75 ohm, negative sync<br>C: 0.286 V (p-p) (burst signal), 75 ohm |
| Video/audio input (2) | Video: 1 V (p-p), 75 ohm, negative sync<br>Audio: 300 mV (rms) |
| Component input (2) | Y: 1 V (p-p), 75 ohm, including sync<br>Pr/Cr: ±0.35 V (p-p), 75 ohm<br>Pb/Cb: ±0.35 V (p-p), 75 ohm<br>Audio: 300 mV (rms)<br>Suggested resolutions: 1080P, 1080i, 720p, 480p, 480i |
| HDMI input (4) | 4 HDMI input jacks<br>HDCP compliant<br>E-EDID compliant<br>Suggested scan rates: 1080p, 1080i, 720p, 480p, 480i |
| VGA input | E-EDID compliant<br>Suggested scan rates: 640x480/60 Hz, 800x600/60 Hz, 1024x768/60 Hz, 1920x1080/60 Hz<br>Audio input: Headphone mini-jack for stereo |
| Accessories | Remote control and batteries (2 AAA)<br>AC power cord<br>Component cable<br>*User guide*<br>*Quick Setup Guide* |

# Legal notices

### *FCC Part 15*

This device complies with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply within the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### *FCC warning*

Changes or modifications not expressly approved by the party responsible for compliance with the FCC Rules could void the user's authority to operate this equipment.

### *Cables*

Connections to this device must be made with shielded cables with metallic RF/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

### *Canadian notice*

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

"Standard Television Receiving Apparatus-Appareil de reception télévision ordinaire, Canada BETS-7 / NTMR-7".

### *Dolby License Notice and Trademark Acknoledgement*

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

### *HDMI*

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

### *SRS TruSurround HD*

is a trakemark of SRS Labs, Inc.

TruSurround HD technology is incorporated under license from SRS Labs, Inc.

# Two-year limited warranty

Insignia Products ("Insignia") warrants to you, the original purchaser of this new **NS-L47Q09-10A** ("Product"), that the Product shall be free of defects in the original manufacture of the material or workmanship for a period of two (2) years from the date of your purchase of the Product ("Warranty Period"). This Product must be purchased from an authorized dealer of Insignia brand products and packaged with this warranty statement. This warranty does not cover refurbished Product. If you notify Insignia during the Warranty Period of a defect covered by this warranty that requires service, terms of this warranty apply.

### *How long does the coverage last?*

The Warranty Period lasts for 2 years (730 days) from the date you purchased the Product. The purchase date is printed on the receipt you received with the Product.

### *What does this warranty cover?*

During the Warranty Period, if the original manufacture of the material or workmanship of the Product is determined to be defective by an authorized Insignia repair center or store personnel, Insignia will (at its sole option): (1) repair the Product with new or rebuilt parts; or (2) replace the Product at no charge with new or rebuilt comparable products or parts. Products and parts replaced under this warranty become the property of Insignia and are not returned to you. If service of Products or parts are required after the Warranty Period expires, you must pay all labor and parts charges. This warranty lasts as long as you own your Insignia Product during the Warranty Period. Warranty coverage terminates if you sell or otherwise transfer the Product.

### *How to obtain warranty service?*

If you purchased the Product at a retail store location, take your original receipt and the Product to the store you purchased it from. Make sure that you place the Product in its original packaging or packaging that provides the same amount of protection as the original packaging. If you purchased the Product from an online web site, mail your original receipt and the Product to the address listed on the web site. Make sure that you put the Product in its original packaging or packaging that provides the same amount of protection as the original packaging.

To obtain in-home warranty service for a television with a screen 30 inches or larger, call 1-888-BESTBUY. Call agents will diagnose and correct the issue over the phone or will have an Insignia-approved repair person dispatched to your home. Should the Insignia-approved repair person not correct the issue on the first call, an Insignia television (size and features to be determined by Insignia) will be loaned to you until your TV is repaired and returned, at no charge to you. This feature is only available to Insignia television consumers residing in the United States.

### *Where is the warranty valid?*

This warranty is valid only to the original purchaser of the product in the United States, Canada, and Mexico.

### *What does the warranty not cover?*

This warranty does not cover:

- Customer instruction
- Installation
- Set up adjustments
- Cosmetic damage
- Damage due to acts of God, such as lightning strikes
- Accident
- Misuse
- Abuse
- Negligence
- Commercial use
- Modification of any part of the Product, including the antenna
- Plasma display panel damaged by static (non-moving) images applied for lengthy periods (burn-in).

This warranty also does not cover:

- Damage due to incorrect operation or maintenance
- Connection to an incorrect voltage supply
- Attempted repair by anyone other than a facility authorized by Insignia to service the Product
- Products sold as is or with all faults
- Consumables, such as fuses or batteries
- Products where the factory applied serial number has been altered or removed

REPAIR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. INSIGNIA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT, INCLUDING, BUT NOT LIMITED TO, LOST DATA, LOSS OF USE OF YOUR PRODUCT, LOST BUSINESS OR LOST PROFITS. INSIGNIA PRODUCTS MAKES NO OTHER EXPRESS WARRANTIES WITH RESPECT TO THE PRODUCT, ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD SET FORTH ABOVE AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE WARRANTY PERIOD. SOME STATES, PROVINCES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE OR PROVINCE TO PROVINCE.

Contact Insignia:

For customer service please call 1-877-467-4289
www.insigniaproducts.com

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